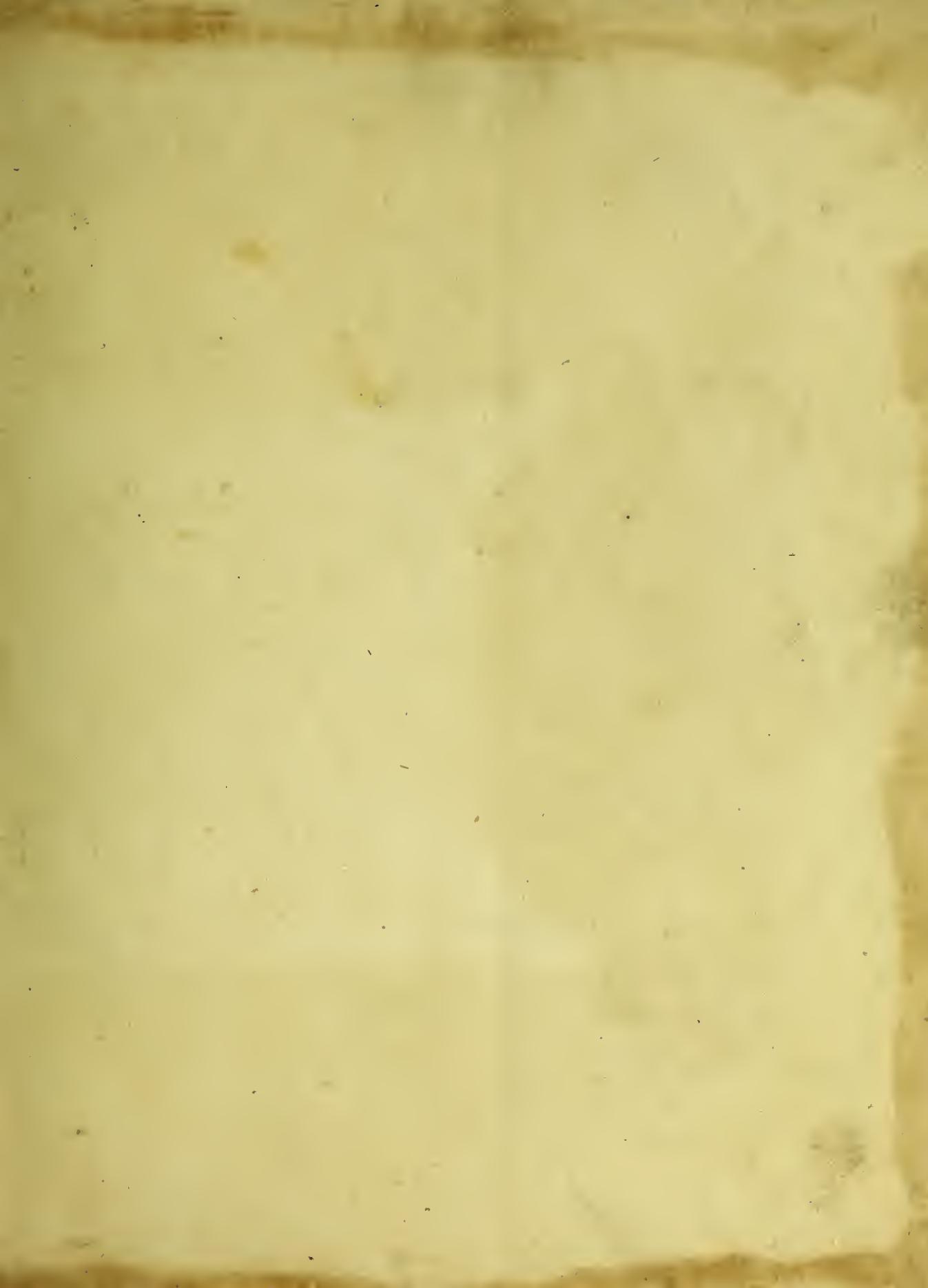


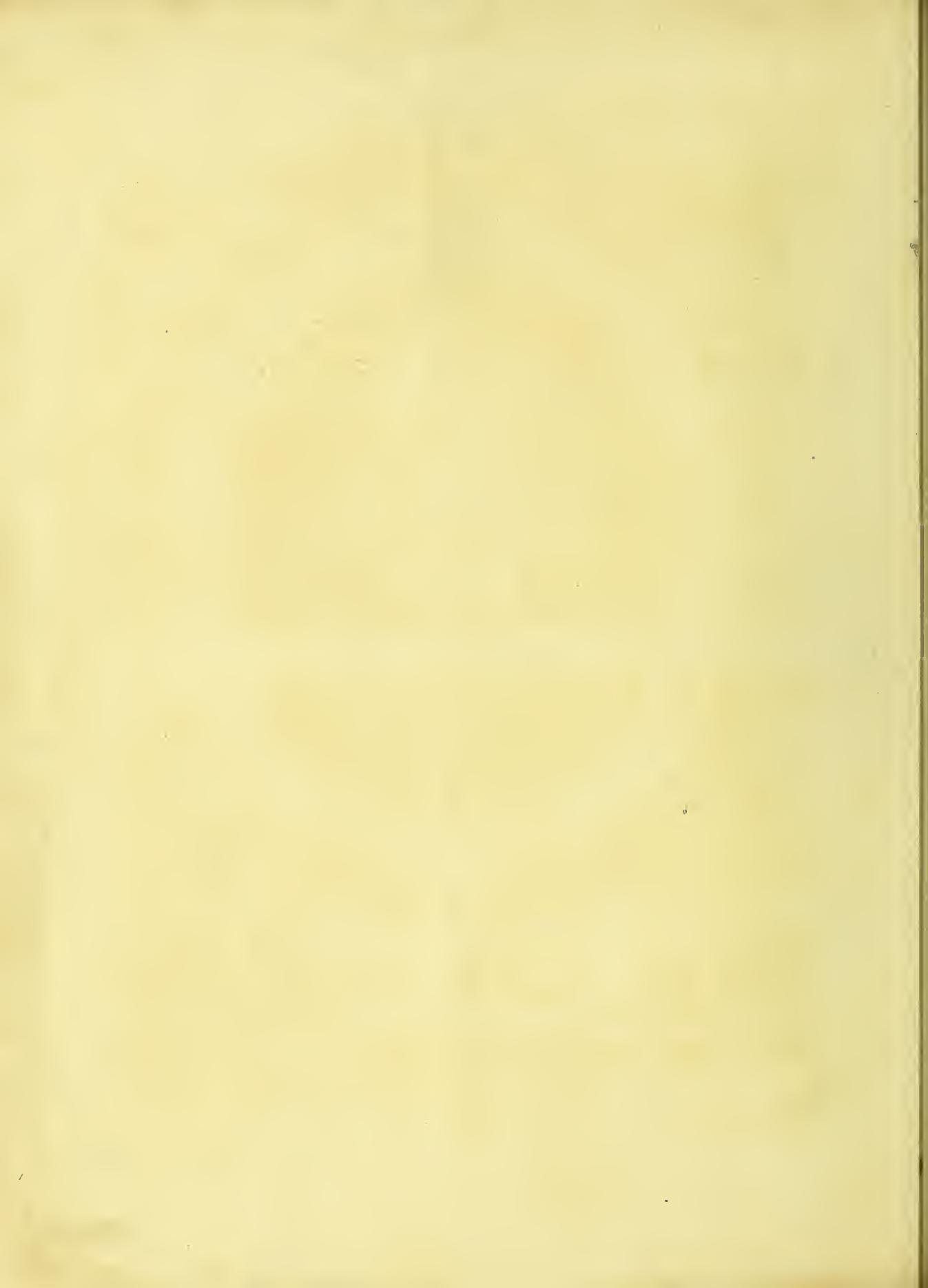


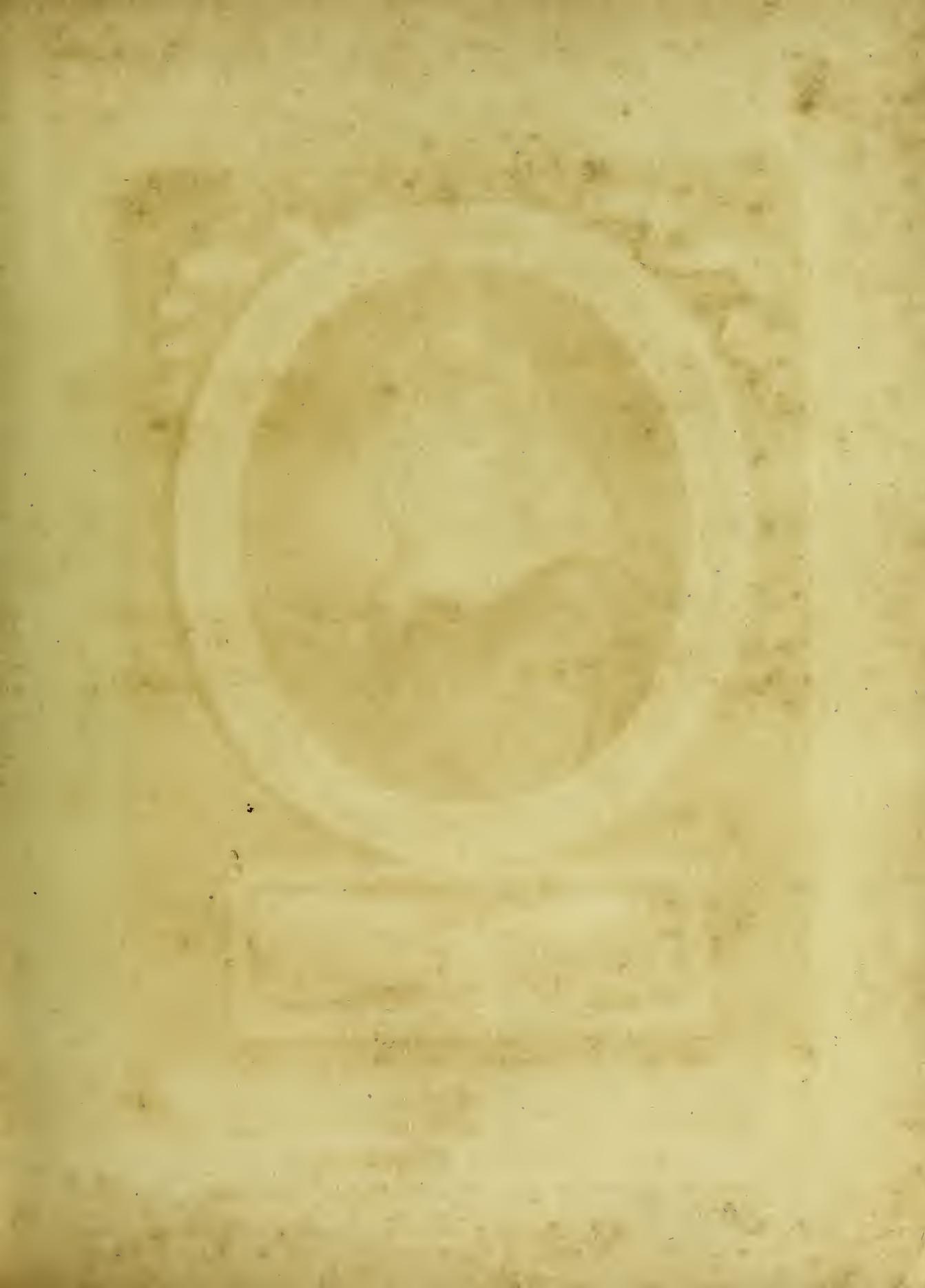
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## MR. NICHOLAS CULPEPER.

BORN 18. October 1616. DEPARTED THIS LIFE 19<sup>th</sup> or January 1654.

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CULPEPER's  
ENGLISH PHYSICIAN;  
AND COMPLETE  
HERBAL.

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TO WHICH ARE ANNEXED,

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CRITICAL AND EXPLANATORY;

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VOL. I. Containing the HERBAL.

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SIXTEENTH EDITION, improved by the Addition of the LINNÆAN NAME to each Herb, Plant, and  
Tree; and a LIFE of CULPEPER.

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M.DCCC.XVII.



To THOMAS DUNKERLY, Esq.

PROVINCIAL GRAND MASTER

OF THE ANCIENT AND HONOURABLE FRATERNITY OF FREE AND  
ACCEPTED MASONS OF DORSET, ESSEX, GLOUCESTER,  
SOMERSET, BRISTOL, SOUTHAMPTON,  
AND THE ISLE OF WIGHT.

SIR,

**P**RESUMING on the well-known goodness of your Heart, and on that liberality of Sentiment, which renders your Actions, like your Descent, NOBLE, permit me to solicit your protection to a Work, which, though of the first Importance in the Cause of Humanity, will acquire new Vigour under your Auspices, and shine forth with accumulated Lustre under the Shield of your Arm, which, like that of the good Samaritan, is ever reached out to administer Comfort and Relief to your afflicted Fellow-Creatures.

It has been a long-established Maxim among civilized Societies, to submit to their President whatever is thought conducive to the general Good. You are the illustrious Head of many respectable Lodges of free and accepted Masons, whose Care it has been to cherish a Contemplation of the deep mysteries of Nature, from time immemorial. And, though the Body of this invaluable Work is not of my Production, yet should the Notes and

and Illustrations, and the other Additions now made to it, be thought worthy of your Approbation, or of the Notice of my masonic Brethren, I trust they will find in them an ample store of Precepts, whereby the Blessings of Health might be universally dispensed, and the happiness of Mankind more permanently secured ; to promote which is the leading Feature of masonic Principles.

Should this important Object be obtained, and medical Knowledge be diffused through the Empire in its pure and pristine State, disrobed of its ambiguous Dress, and made the Friend of every Family---my Heart will rejoice, and my utmost Desires be accomplished.

Wishing you internal and external Happiness in the terrene Lodge here, and eternal Joy and Glory in the divine *Sanctum Sanctorum* above, permit me publicly to assure you how unfeignedly I am,

SIR,

Your most humble

and devoted Servant,

E. SIBLY.

## PREFACE BY THE EDITOR.

**D**ISEASE is undoubtedly the most fatal enemy of mankind. To prevent its approaches, or to overcome its attacks, is perhaps the most important concern of our lives; and an inquisition that appears only attainable by the most natural and simple means. For this purpose, Mr. Nicholas Culpeper's **ENGLISH PHYSICIAN** seems peculiarly well adapted; since it resorts, for every mode of Cure, to that infallible source prepared by God and Nature, in the vegetable system; whence flow spontaneously the genuine Virtues of Medicines, diffused universally over the face of the whole earth, *where nothing grows in vain!*

Indeed, had this ingenious and most invaluable Work no other recommendation than having passed through so many editions, yet would it sufficiently justify my offering it once more to the notice and consideration of an enlightened public. But, when we reflect on the discoveries since made in the botanical world—the great acquisitions derived to the work by the addition of upwards of one hundred newly-discovered aromatic and balsamic herbs—*independent of the medical skill and philosophical perception displayed by its Author*, we shall find innumerable instances of its utility, and perceive in it a fund of information and medical acquirements, which promise the most extensive benefits to society, by forming a *Domestic Physician* in every Family.

It might perhaps have been replete with the happiest consequences to our beloved King under his late infirmity, (1789,) and would unquestionably have tended more quickly to dispel the painful apprehensions of his

afflicted people, had this great master of human nature been contemporary with us. No man, I believe, but the *professionally* envious, will presume to question his medical abilities, or prescribe limits to his knowledge, which eclipsed the practice of every physician of his day, and put to silence the whole tribe of empirics and quacks. I cannot give a higher proof of his professional discernment, nor any thing more applicable to the anxious feelings of my reader, than by showing how exactly he has pointed out the disorder with which his Majesty was afflicted, and the simples which are applicable to its several stages, so exact and critical, that if he had been living, and appointed one of the consulting physicians, he could not have marked the line of it with more precision.

He distinguishes diseases which produce phrenzy into three different classes; the second he terms *periphrenetio*. He describes it thus: “ It is preceded by a very sharp fever, which will rage for a few days violently; when it subsides, the delirium takes place, with fits of the fever at irregular intervals; the patient will be remarkably voracious; all his passions will be very strong; his lucid intervals short; his sleep seemingly of a long duration, but, in fact, this sleep is nothing but dozing; when he awakes, he will seem fully occupied with some favourite subject, such as singing, hunting, dancing, &c. His recollection sometimes will serve him so as to know particular persons, but that will not last long.”

After having described the effect of the disorder, he next enters minutely into an investigation of the seat of it. And here, with his usual severity against his brethren, the physicians, he says, “ They, poor ignorant men, think this a disorder *in the head*; whereas, in fact, it arises from an injury which is received in the diaphragm, or midriff. The use of this membrane is (besides sustaining the upper parts of the abdomen) to convey cooling moisture to the brain, in order to cool the hot humours which fly to it from the several parts of the intestines, and particularly

cularly the liver. Now, if the diaphragm be strained, bruised, or otherwise hurt, it consequently fails in performing its function, and the brain will suffer a delirium, more or less, in proportion as the disorder in the diaphragm is better or worse."

He than states the manner in which this malady may arise. " It may happen by over-lifting, by fighting, by violent riding, or by want of a proper quantity of nourishment, whereby the membrane loses its tone and vigour, and fails in its duty. Hence the first symptom of approaching death, which appears in people who are starved, is a delirium, which is occasioned by a heat in the brain, for want of proper moisture from the midriff."

He next points out the remedy, which he confesses is very difficult; inasmuch as the midriff, being a membrane only, will not yield to the same remedies that the muscular part of the body will. Having a view towards "keeping the fever under, the internals should be strengthened by nourishing aliments. The chest and abdomen rubbed with aromatic and corroborating oils—the habit prevented from being too lax—and the bowels, if tending to laxitude, should be bound up, and kept in due tone."

He then gives a variety of oils and simples, which are extremely useful in this disorder; and concludes with advising constant attention to the patient; to indulge his desires as often as it may be done with safety, but not to disturb his intestines with too much physic, and thereby weaken and injure, instead of relieving, the patient.

In a similar way does this learned author proceed in the treatment of all the infirmities incident to mankind, carefully pointing out, by anatomical rules, the seat of the disorder, and then applying such simple medicines and regimen as Nature herself directs, without exposing the patient to the danger of violent experiments, or torturing his intestines with

with irritating drugs, which, instead of effecting a cure, often augment the disease, and not unfrequently occasion premature death.

Some authors have laboured to prove, that the difference of opinion betwixt Culpeper and his brother physicians originated entirely from his own surly and vindictive disposition. But whoever has taken the pains to investigate the controversy, will find this assertion most remote from the truth. He found the *practice of physic* directed more by terms of art than by principles of nature; and governed more by avarice than by a genuine desire of restoring health and strength to the desponding patient. He condemned this practice, by exposing the wickedness of some, and the ignorance of others; and, though he had the whole medical corps to encounter, yet such was the force of his reasoning, and the superiority of his abilities, that they submitted to the sentence he had passed upon them, without the formality of a defence.

But, after a while, the allied sons of Esculapius, having discovered that Mr. Culpeper's practice was guided by *astrological* precepts, rallied again, and renewed the combat with accumulated fury. Every insulting reflection, calculated to impeach his understanding, was levelled at him; and the occult properties of the celestial system were ridiculed and denied. Our author, however, was not to be driven so easily from his purpose. He immediately published a tract in defence of the astral science, which he maintained against the united opposition of both the Colleges; and, by introducing it into his practice, he performed cures which astonished his competitors, and rendered his name immortal.

Experience, therefore, ought to convince us, however opposed by abstract reasoning, that there is indisputably an innate and occult virtue infused into all sublunary things, animal, vegetable, and mineral, by the action of the heavenly bodies upon the ambient and elementary matter, which, by the motions and mutations of the luminaries being constantly

varied, produce that astonishing variety in Nature, which is infinitely beyond our knowledge and comprehension. Hence arise the sympathies and antipathies so astonishingly conspicuous in all the productions of the earth, whether animate or inanimate, in men or brutes, in vegetables or minerals, and in every species of matter definable to our senses. Here also we discover the *essential properties* and *first ground* of all medicine, and are furnished with the best reasons why it is impossible to prescribe remedies at all times applicable to the stupendous varieties afflicting the body of man, without the aid of sidereal learning.

There is no doubt but the remote as well as the propinquate causes of things ought seriously to be investigated both by philosophers and physicians: or else the music of science will often fail of its harmony, and produce discord and disgust. The planetary influx, and the force of the ambient, are as necessary to be consulted as the structure of the body, and the laws of pulsation; otherwise our practice will be imperfect, and our success determined by chance. For this reason the learned Senertus, in his Elements of Physic, highly commends those modern physicians who unite astrological with medical knowledge: "For," continues this ingenuous author, "the stars act upon inferior bodies, not only by heat and light, but by *occult* influence; nor can it be doubted, but that all plants are under the government of some particular planet, and perform their operation by virtue of the sympathy co-existent in their nature."

By the right knowledge of times and seasons, of causes and effects, the most important cures have unquestionably been performed. "No man," says Galen, "can reasonably deny, but that the natural ground of medicine and disease depends much upon astral influx and elementary impression; and hence it is, that by the nativity or decumbiture of the patient we are enabled to discern both the cause and conclusion of the disease; and, by

considering the quality of the principal aspects, in airy, watery, earthy, or fiery, signs or constellations, all doubts and difficulties are removed; a plain and obvious mode of treatment presents itself to our view; and furnishes a striking proof of the wise œconomy of the Supreme Being, in governing this inferior world by the influence and energy of the superior bodies, whose very *minutiae*, as well as more magnificent phenomena, are invariably obedient to a regular and unerring law.”

But, although the astrologic science be thus useful in guiding our medical enquiries, and necessary in performing the cure of remote and latent diseases; yet were the enemies of Culpeper, like many of the present day, exultingly forward to condemn that which they did not understand; and, by attempting to baffle the secret operations of nature, and the strong influences of the planetary system—of the Pleiades, Arcturus, and Orion—they exposed the weakness of their own imaginations, which they insultingly opposed to *the glorious host of heaven*.

Perfectly indifferent, myself, as to the cavils of dissatisfied critics, or to the censure of interested men, I shall revive that simple practice of Culpeper, which spread through the British realms the happy art of restoring to pristine vigour—the decaying life and health of mankind. For this purpose, I have incorporated into the present edition of his **PHYSICIAN** and **HERBAL**, every useful part of all his other works; and have added a selection of easy Rules, for attaining an intimate acquaintance with all the British Herbs and Plants; for discovering the real planetary influx; and for gathering them at those particular seasons when they imbibe a double portion of efficacy and virtue.

In gathering herbs for medicinal uses, the planetary hour is certainly of importance, however modern refinement might have exploded the

idea. In nature, the simplest remedies are found to produce the most salutary effects; and in earlier times, when the art of medicine was less obscured, and practised more from motives of benevolence, the world was less afflicted with disease, and the period of human life less contracted. The laboratory of Nature, were it but consulted, furnishes ample remedies for every cureable disorder incident to mankind; for, notwithstanding the parade of compound medicines, the art of healing consists not so much in the preparation, as in the due application, of the remedy. Hence it happens that old women, without education or abilities, by the help of a simple herb gathered in the planetary hour, in which hour it imbibes its greatest strength and esculent virtues, will sometimes perform very extraordinary cures, in cases where the regular-bred physician is absolutely at a loss how to proceed.

I would not here be understood to cast any unworthy reflections upon those exalted characters, who have made physic, and the alleviation of human infirmity, the principal study of their lives. The many invaluable discoveries lately added to the *Pharmacopœia*, both from the vegetable and mineral worlds, are strong arguments of the necessity of regular practice, and of professional education, in forming the Physician. But, were the bulk of these gentlemen to consult a little more the planetary influence, and the effects of Saturn and the Moon in each crisis and critical day, and regulate their prescriptions accordingly, I am persuaded more immediate relief would in most cases be afforded to the sick and languishing patient. Surgery too, which, like a guardian angel, steps forward to alleviate the perilous accidents of the unfortunate, would gain much improvement by the like considerations. It is not the humane and liberal professors of physic or surgery whose practice deserves censure, but the mercenary tribe of pretenders to physic who now pervade the kingdom, and, like a swarm of locusts from the

cast, prey upon the vitals of mankind. These monsters in the shape of men, with hearts callous to every sentiment of compassion, have only *fees* in view. Governed by this sordid principle, they sport with life, unmoved amidst the bitter anguish and piercing groans of the tortured patient, whom, when too far gone for human aid to restore, they abandon to despair and death.

To prevent as much as possible the growth of so enormous a traffic, it requires that the practice of physic, instead of being clothed in a mystic garb, should be put upon a level with the plainest understanding, and the choice and quality of our medicines be rendered as obvious and familiar as our food. Instinct, in the brute species, furnishes this discrimination in the most ample and surprising manner ; and, in the primitive ages of the world, when men were rich in years, and blessed with length of days, it was the custom to consult individually their own complaint, and their own cure. To restore the primitive practice, was the god-like aim of the immortal Culpeper, when he compiled this invaluable Work ; for, since it was the intention of our beneficent Creator, to provide a natural remedy for all our infirmities, so it would be derogatory to his attributes, to suppose the knowledge of them limited to a few, or confined to a small class of his creatures. On the contrary, this knowledge lies open to the wayfaring man—it grows in every field, and meets us in all our paths ; and was mercifully given to alleviate the pangs of disease—to eradicate the pestilential seeds of infection—to invigorate the constitution, and to strengthen Nature—eventually reducing the perils to which we are exposed, and making rosy **HEALTH** the Companion of our lives.

JAN. 1791.

E. SIBLY.

LIFE

## LIFE OF CULPEPER.

**N**ICHOLAS CULPEPER, the original Author of this Work, was born October the 18th, 1616. He was the son of Nicholas Culpeper, a clergyman, and grandson of Sir Thomas Culpeper, Bart. He was for some time a student in the university of Cambridge; and soon after was bound apprentice to an apothecary, under whom he acquired a competent knowledge of the *materia medica*, and of the art of preparing and compounding medicines; but he employed all his leisure hours in adding to the study of *Physic* that of *Astrology*, both which he afterwards professed; and set up business in Spitalfields, next door to the Red Lion, (formerly known as the Half-way House between Islington and Stepney,) where he had considerable practice, and was much resorted to for his advice, which he gave to the poor gratis. In his works he styles himself “Student in *Physic* and *Astrology*;” and those Physicians of early times, whom he seems to have particularly studied, *Hippocrates*, *Galen*, and *Avicenna*, regarded those as homicides who were ignorant of *Astrology*: *Paracelsus*, indeed, went farther; he declared, a physician should be pre-destinated to the cure of his patient; and that the horoscope should be inspected, the plants gathered at the critical moment, or at least during the planetary hour.

Culpeper was in politics and religion a Puritan; he was for a short time in the army, and was wounded in an engagement; but his chief warfare was with the College of Physicians, whom he accused of craft and ignorance. Like the popish clergy, he says, they endeavour to keep the people in ignorance of what might be useful either in preserving or restoring health. To counteract their endeavours, he published, in 1649, a translation of the Dispensary of the College of Physicians, in small 4to, adding to the account of each drug and preparation a list of their supposed virtues, and of the complaints in which they were usually given. He published several other works, the most celebrated of which is his *HERBAL*, entitled, “The English Physician Enlarged, [of which the present is an improved edition,] being an astrologo-physical Discourse of the vulgar Herbs of the Nation; containing a complete Method or Practice of *Physic*, whereby a Man may preserve his Body in Health, or cure himself when sick, with such things only as grow in England, they being most fit for English Constitutions.” This work has always been in great celebrity and request, and has been many hundred times reprinted, not only in England and Scotland, but in America. He published also, “*Semeiotica Uranica*, or an Astrological Judgment of Diseases, 1651.”

I shall not, in the present publication, farther enlarge upon the events of the life of this celebrated physician, since I have, in my *ILLUSTRATION OF ASTROLOGY*, devoted a considerable space to the consideration of his horoscope, and of the time and manner of every accident that happened to him, and of every employment in which he was engaged. He died at his house in Spitalfields, on the 10th of January, 1654, in the thirty-eighth year of his age; leaving behind him one daughter. His widow afterwards married *JOHN HEYDON*, another noted student in *physic* and *astrology*, author of many esteemed works.

# CULPEPER'S EPISTLE TO THE READER.

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**T**AKE Notice, That in this Edition I have made very many additions to every sheet in the Book; and, also, that those Books of mine that are printed of that Letter the small Bibles are printed with, are very falsely printed; there being twenty or thirty gross Mistakes in every Sheet, many of them such as are exceedingly dangerous to such as shall venture to use them: And therefore I do hereby warn the Public of them: I can do no more at present; only take notice of these Directions by which you shall be sure to know the *True one* from the *False*.

*The first Direction.*—The True one hath this Title over the head of every Book, THE ENGLISH PHYSICIAN AND COMPLETE HERBAL. The small Counterfeit ones have only this Title, THE ENGLISH PHYSICIAN.

*The second Direction.*—The True one hath these Words, GOVERNMENT AND VIRTUES, following the Time of the Plants flowering, &c: The Counterfeit small ones have these Words, VIRTUES AND USE, following the Time of the Plants flowering.

*The third Direction.*—The True one is of a larger Letter than the Counterfeit ones, which are in *Twelves*, &c. of the Letter small Bibles used to be printed on. I shall now speak something of the Book itself.

All other Authors that have written of the Nature of Herbs, give not a bit of a Reason why such an Herb was appropriated to such a part of the Body, nor why it cured such a Disease. Truly my own Body being sickly, brought me easily into a capacity, to know that Health was the greatest of all earthly Blessings, and truly he was never sick that doth not believe it. Then I considered that all Medicines were compounded of Herbs, Roots, Flowers, Seeds, &c. and this first set me to work in studying the Nature of Simples, most of which I knew by sight before; and indeed all the Authors I could read gave me but little satisfaction in this particular, or none at all. I cannot build my faith upon Authors' words, nor believe a thing because they say it, and could wish every body were of my mind in this,—to labour to be able to give a reason for every thing they say or do: They say Reason makes a Man differ from a Beast; if that be true, pray what are they that, instead of Reason, for their Judgment, quote old Authors? Perhaps their Authors knew a Reason for what they wrote, perhaps they did not; what is that to us? Do we know it? Truly, in writing this Work first, to satisfy myself, I drew out all the Virtues of the vulgar or common Herbs, Plants, and Trees, &c. out of the best, or most improved Authors I had, or could get; and having done so, I set myself to study the Reason of them. I knew well enough the whole World, and every thing in it, was formed of a composition of contrary Elements, and in such a harmony as must needs shew the wisdom and power of a great God. I knew as well this Creation, though thus composed

posed of contraries, was one united Body, and Man an Epitome of it; I knew those various affections in man, in respect of Sickness and Health, were caused naturally (though God may have other ends best known to himself) by the various operations of the Microcosm; and I could not be ignorant, that as the Cause is, so must the Cure be; and therefore he that would know the Reason of the operation of Herbs, must look up as high as the stars, astrologically. I always found the Disease vary according to the various motion of the Stars; and this is enough, one would think, to teach a man by the Effect where the Cause lies. Then to find out the Reason of the operation of Herbs, Plants, &c. by the Stars went I; and herein I could find but few Authors, but those as full of nonsense and contradictions as an egg is full of meat. This not being pleasing, and less profitable to me, I consulted with my two Brothers, DR. REASON and DR. EXPERIENCE, and took a voyage to visit my Mother NATURE, by whose advice, together with the help of DR. DILIGENCE, I at last obtained my desire; and, being warned by MR. HONESTY, a Stranger in our days, to publish it to the World, I have done it.

But you will say, *What need I have written on this Subject, seeing so many famous and learned Men have written so much of it in the English Tongue, nay, much more than I have done.*

To this I answer, Neither GERARD nor PARKINSON, or any that ever wrote in the like nature, ever gave one wise reason for what they wrote, and so did nothing else but train up young Novices in Phyfic in the School of Tradition, and teach them just as a Parrot is taught to speak; an Author says so, therefore it is true; and, if all that Authors say be true, why do they contradict one another? But in mine, if you view it with the eye of Reason, you shall see a Reason for every thing that is written, whereby you may find the very Ground and Foundation of Phyfic; you may know what you do, and wherefore you do it; and this shall call me Father, it being (that I know of) never done in the world before.

I have now but two things more to write, and then I have done.

1. *What the Profit and Benefit of this Work is.*
2. *Instructions in the Use of it.*

1. The Profit and Benefits arising from it, or that may accrue to a wise man from it, are many, so many that should I sum up all the particulars, my Epistle would be as big as the Book; I shall only quote some few general heads.

First; The admirable Harmony of the Creation is herein seen, in the influence of Stars upon Herbs and the Body of Man, how one part of the Creation is subservient to another, and all for the use of Man, whereby the infinite power and wisdom of God in the Creation appears; and if I do not admire at the simplicity of the Ranters, never trust me; who but viewing the Creation can hold such a fottish opinion, as that it was from

Eternity, when the mysteries of it are so clear to every eye? but that Scripture shall be verified to them, *Rom. i. 20.* “*The invisible things of “Him from the Creation of the World are clearly seen, being understood by “the things that are made, even his Eternal Power and Godhead, so that “they are without excuse.*”—And a Poet could teach them a better Lesson:

“*Because out of thy thoughts God should not pass,*  
“*His Image stamped is on every Grass.*”

This indeed is true, God has stamped his Image upon every Creature, and therefore the abuse of the Creature is a great sin; but how much more doth the wisdom and excellency of God appear if we consider the Harmony of the Creation in the Virtue and Operation of every Herb?

Secondly, Hereby you may know what infinite Knowledge *Adam* had in his Innocence, that by looking upon a Creature, he was able to give it a name according to his Nature; and by knowing that, thou mayest know how great thy fall was, and be humbled for it even in this respect, because hereby thou art so ignorant.

Thirdly, Here is the right way for thee to begin the study of Physic, if thou art minded to begin at the right end, for here thou hast the Reason of the whole Art. I wrote before in certain Astrological Lectures, which I read, and printed, intituled, *Astrological Judgment of Diseases*, what Planet caused (as a second Cause) every Disease, and how it might be found out what Planet caused it; here thou hast what Planet cures it by *Sympathy* and *Antipathy*; and this brings me to my last promise, *viz.*

## 2. Instructions for the right Use of the Book.

And herein let me premise a word or two, The Herbs, Plants, &c. are now in the Book appropriated to their proper Planets. Therefore,

First, Consider what Planet causeth the Disease: that thou mayest find in my aforesaid Judgment of Diseases.

Secondly, Consider what part of the Body is afflicted by the Disease, and whether it lies in the Flesh, or Blood, or Bones, or Ventricles.

Thirdly, Consider by what Planet the afflicted part of the Body is governed: that my Judgment of Diseases will inform you also.

Fourthly, You may oppose Diseases by Herbs of the Planet opposite to the Planet that causeth them: as Diseases of *Jupiter* by Herbs of *Mercury*, and the contrary; Diseases of the *Luminaries* by Herbs of *Saturn*, and the contrary; Diseases of *Mars* by Herbs of *Venus*, and the contrary.

Fifthly, There is a way to cure Diseases sometimes by *Sympathy*, and so every Planet cures his own Disease; as the *Sun* and *Moon* by their Herbs cure the Eyes, *Saturn* the Spleen, *Jupiter* the Liver, *Mars* the Gall and Diseases of Choler, and *Venus* Diseases in the Instruments of Generation.

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# CULPEPER's ENGLISH PHYSICIAN,

AND COMPLETE

## H E R B A L.

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Of the NATURAL APPROPRIATION of HERBS in the CURE  
of all DISEASES.

**T**HE temperature, virtues, and use, of Plants, as serving to heal or sustain the body in health; as also their dangerous qualities, and the remedies against them; are well worthy our enquiry. This speculation is divided into two parts. 1. Therapeutic, or curatory. 2. Threptic, or alimentary. In both which, vegetables may be considered according to their substance and consistence, or else according to their accidents.

I. According to their substance or consistence, they are, 1. Thin or gros. 2. Lax or constrict. 3. Clammy or brittle. 4. Heavy or light. Tenuity of parts is in those things which are aerious in essence and substance; which, being subtile, do easily communicate their virtue unto any liquor, and are of easy distribution in the body, easily actuated, and not abiding, and are in matter not much compact, but easily divided by natural heat, having little of earth, and that mixed with much humidity, or elaborated by fiery heat, as in things very acid, sharp, and friable, for the most part. Crassitude of parts is in those things which are terrene; which, being more gros, do not quickly communicate their virtues unto liquids, and therefore the virtues thereof are exerted in the stomach, and seldom or ever pass unto the liver; and such have much matter, as in mixtures very terrene, or exquisite mixtures of the aqueous humidity and terrene; without much prevalency

No. 2.

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of

of heat; so for the most part are austere, acerb, sweet, bitter, salt, and few insipid, Rarity is in dry bodies; hardnes in the dry and terrene. Clammines in moist bodies: brittleness in dry. Heaviness in thick bodies: and lightness in the rarefied. Tenuity looseneth and penetrateth; crassitude obstructs; softness lenifies and conglutinates; and hardness resisteth and drieth up.

II. According to their accidents, they may be taken notice of as medicamentous and alimentary. 1. As medicamentous, and so according to their immediate and more remote accidents. 2. According to their more immediate, i. e. the qualities, and way of finding them out.

The Pototetology, or qualities, first, second, third, and fourth. The first are, Calidity, or heat, which causeth motion, and disposeth the parts by a right conjunction and situation thereof. It heateth, subtilizeth, digesteth, openeth, maturateth, and rarefieh, and causeth agility: if excessive, it doth ascend, inflame, attract, or disturb, as thapsia, &c. 2. Frigidity, or coldness, doth cool, conjoin, inspissate, and hinder digestion, by the obstruction of calidity, and by shutting the passages, hindereth distribution: also, if excessive, it so filleth, that it expels the juice, coagulates, and congeals, as poison, &c. 3. Humidity, or moisture, is of easy separation, lenifying and lubrifying: if excessive, it burdeneth the spirits and loadeth the same: and, if aqueous, it causeth nauseousnes, and suffocates the ex-citation of heat, causeth flatulencies, oppilations, slowness of action, and debility of motion, in all the parts; otherwise it lenifies, lubrifies, looseneth, maketh the blood and spirits more gross, and obtunds the acrimony of humours, as mallows, &c. 4. Siccit, or drynes, doth colligate and bind, and causes a stronger disposition of the body: if excessive, it constringeth the passages and hindereth the excretion, presses forth the juices out of the body, and causeth tabefaction; if in the last degree, it consumeth moisture, causeth interception, suffocation, and death, as cresses, &c. Here the degrees are four. The 1st scarce sensibly altereth the body. The 2d manifestly, yet without trouble or hurt. The 3d vehemently, but without corruption. The 4th most violently, and with great hurt unto the body. In each of which degrees there are three mansions, acting remissly, intensely, or in a mean; or in the beginning, middle, or end, thereof.

The chemists, instead of these four qualities or elements, substitute, 1. Their Sal, from which is all sapor or taste, which is as it were the ashes of a body; for salt is a dry body, defending mixed bodies from putrefaction, of excellent faculty to dissolve, coagulate, cleanse, and evacuate; from which ariseth all solidity of body, denominations,

denominations, tastes, and many other virtues analagous to the earth, as being firm, fixed, and the subject of the generation of all bodies; and is therefore called by chemists, *Sal, sal commune, acerbum & amare, corpus, materia, patiens, fixum, ars, scusus materiale*. 2. Sulphur, whence all odour or smell ariseth, and is like the flame; or sulphur is that sweet balsam, oily and viscid, which preserves the natural heat of the parts; the instrument of all vegetation, accretion, and transmutation, and the original of all smells, both pleasant and unpleasant; therefore it is compared to the fire, easily receiving the flame, as all oily and resinous bodies do: also it lenifieth and conglutinateth, or conjoineth contrary extremes, as Sal and Mercury, that being fixed and this volatile, it participating of both extremes, so it tempereth the dryness of Salt, and moisture of Mercury, as being viscous; the density of Salt and penetration of Mercury by its remiss fluidity, and the bitterness of Salt and acidity of Mercury by its sweetnes; therefore it is called, *Sal Petre, dulce, anima forma, agens, inflammabile, natura, judicium, & spirituale*, by the chemists. 3. Mercurius, whence is all colour, and is represented by smoke or fume; or Mercury is that acid liquor, permeable, penetrable, ethereous, and most pure, from which ariseth all nourishment, sense, motion, strength, colour, and retardation of properant old age; so it is compared to the element of air and water; to the first, as being turned into vapour by the vicinity of heat; and to this, as being hardly contained by its own term, but easily in some others; or it is that essential body, that by its aereal, most subtile, vivific, and spirituous, substance, is the pabulum of life, and the proximate instrument of the essence or form; and is called by chemists, *Sal ammoniacum, acidum, spiritus, idea, informans aut movens, vaporosum, intelligentia, intellectus, gloriosum!* Also Mercury containeth a sulphureous and saline substance; Sulphur a salt and mercurial; and Salt an oleaginous and material; and the phlegm and caput mortuum are not principles, but their integuments, and without all Hippocratic virtue; the first being only moist, the other dry and emplastic. Also, if mercurial acid and sharp vapours abound, there ariseth the epilepsy, apoplexy, palsey, and all kinds of catarrhs and defluxions, and epidemic and contagious diseases if venomous. Sulphur, if abounding, causeth inflammations and fevers, and the narcotico-soporiferous diseases. Salt exuperant causeth corrosions, ulcers, heat of urine if dissolved, and tumours if coagulated. Thereto belongs tartar, causing the stone, gout, &c.

The second qualities are, 1. The malaetic or mollifying, to which the ecquetic or suppurating hath affinity; for both have an equal and symmetric heat, and a correspondent siccity, yet differing in mode. The suppurating doth produce heat most like unto that of the body, without any consumption or addition of humidity.

midity. The emollient ascends heat a little beyond the proportion of nature, and contracts a little humidity; wherefore that rather operates by quantity than by the quality of heat, but the emollient rather by quality. Therefore that which is exactly suppuratory is emplastic; yet sometimes emollient is the consequence of humidity, if joined with moderate calidit or heat, and is useful in schirrusses and tumours; and, though emollient may be by humectation and evacuation, yet it is properly by healing, loosening, and callignation; emollients being moderately dry and hot, 20 or 30 in schirrusses, and proportionably in other tumours. Hereto belongs the calastic, or loosening; yet this is less hot and more moistening than the emollient, and of a thin substance. 2. Sclerotic or hardening, which properly is that which doth exsiccate without any excess of heat or cold; for cold also may make obdurate, as also too much heat, after another manner than only by exsiccation; for, though that which is dry is hard, yet all that is hard is not dry. But siccit doth dry and indurate two ways; i. e. by altering and making more dry the essence of the parts, which is most properly; or by consuming the humours in the pores; yet sometimes obduration may also be caused by repletion or fulness; and, some say, by cold and drynes. 3. Araxotic and rarefying, or diaphoretic and resolving, which are moderately hot, with tenuity of parts, and very little resiccat or drying; for excessive heat doth not rarefy but burn, and by adustion doth condensate and dry. But moderate heat openeth the passages, and deeply penetrateth by the tenuity of its substance, and easeth pain; also it openeth the pores and attenuates the substance. The proper diaphoretics are, hot, dry, and of thin parts, attenuant, mollifying, and discussing wind; and the rarefacient moderately hot, like our own heat, moistening and of thin parts. 4. Pycnotic or condensating, contrary to the rarefacient, contracting the pores, incrassating what is rarefied and humid, and making it more solid; which is in those things which refrigerate, yet are not terrene or aerious, but aqueous, and are not at all or but little astringent; for these do weakly contract and bind, i. e. by reason of their softness. 5. Anastomotic or aperient, opening the mouths of the vessels; and is in those things that are of gross parts, hot beyond the first degree, sharp, and biting. 6. Stegnotic or binding, contracting, occluding, and confining; shutting the mouths of the vessels, and restraining sensible excretion; and is in those things which are frigid, of gross parts, and without acrimony, as many terrene bodies are; for those things, which ought strongly to constipate and bind, must also have a more strong and tenent faculty; yet some binders are hot and dry, and of thick substance; and others glutinous. 7. Heletic, epispaistic or drawing, attracting the humours from the centre; and is in those things which are hot and of thin parts; for that which is hot attracteth, and that

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more strongly which hath a conjunct tenuity of parts; but those moderately attract which are hot and dry in the second degree; if in the third, more effectually; and chiefly those that are so in the fourth: for the attraction is according to the degree of heat, and is either more natural, or by pntrefaction. Yet some things attract specifically, and not by a manifest quality: as things that are cathartic or purging, and alexiteric or resisting poison. 8. Apocroustic or repercutient, repelling the humours flowing from the centre, as in those things which are frigid and of gross parts. For that which is cold repelleth, and, if it hath a crassitude of parts also, it is more violent, as that which is acerbe or austere; yet those things also repel which are astringents, especially those which are helped by the tenuity of their parts: for the thinness of the substance doth much conduce to astringent; therefore other things that are astringent, by reason of the crassitude of their substance, cannot easily penetrate the more remote parts, precluding the passages. Hereto may the defensive and the intercipient be reduced, being cold, astringent, and repulsive. 9. Ryptic, abstergent or cleansing, removing glutinous and clammy humours in the superficies, or adhering to the pores of the skin, or ulcers, and is in those things which have power to exsiccate with tenuity of substance; neither is it of any great moment whether they are hot or cold, by reason that neither quality hinders action, except excessive. Yet some count them hot chiefly, and dry with a certain thickness of parts to vellicate the humours. 10. Eccathartic, ecphratic, and expurgatory, or removing obstructions; opening not only the pores of the skin, but the inferior ductus of the bowels; as in those things that are nitrous and bitter, although they have some small astringent, and by reason of substance do not differ from those that are abstergative, but in degree; for those things that cleanse the pores and inward passages have a great tenuity of parts, and are moderately hot; as those things which are nitrous and bitter: but those things which, being outwardly applied to the skin, do cleanse the skin and ulcers from their excrements, are destitute of the astringent faculty; but being taken inwardly, although having a certain astringent, yet nevertheless they may purge and cleanse the greater passages, and withal strengthen the same. Also some things lenify or purge by lubrifying, as fat things; by washing and abfersion, as whey and beets; by compression, as quinces; by extinaulation, as things hot, sharp, salt, and of thin parts: and others electively and properly. And emetics cause vomit by relaxation and stimulation, the mouth of the stomach being weak; if the lower part, use dejectories. 11. Leptyntic or attenuating and making thin, as in all those things that are expurgatory, hot, and of thin parts: extenuating gross and tough tumours; and are for the most part hot and dry, 2d or 3d, as things sharp and aromatical; yet some are cold, as lemons, &c. but of thin parts. Hereto belong the temetic, or inci-

ing against viscid humours, which are more strong. And dissolvers of grumous matter, and coagulated; as also extenuants of fat, hot, and dry, 3d, and of thin parts; and the chatactic or laxants, moderately hot, moist, and thin. 12. Emplastic, viscid, or clammy, contrary to the abstergive; for, being applied, it doth tenaciously inhere in the pores of the skin, fill and obstruct the same, as in those things that are fat and glutinous; as also terrene, wanting acrimony and asperity, or roughness. Hereto may be referred the epicerasitic or levigating, helping asperity, by being emplastic or moderately moist. And the emplastics are temperate, without evident heat, cold, or acrimony; some also have a thick terrene essence or consistence, drying without biting; and others aqueous or aereal, so are tenaceous. 13. Emphractic or obstructing, pachyntic or thickening, which are the same: for, as those things which are detergent and purging do free the pores and passages from obstruction, so these obstruct and fill the same, and make the humours of the body tough and thick; and are cold, or temperate without any acrimony, and of a thick terrene substance. 14. Anodyne, paregoric or easing pain, as in those things which have thin parts, and are moderately hot, not much exceeding the temperate, i. e. being hot in the first degree, and rarefacent; so evacuating, digesting, rarefying, extenuating, concocting, and equalizing, whatsoever humour, either sharp, tough, or gross, is inhering in the smaller pores, or grieved parts: and all vaporous crabs, gross or cold spirits, not finding way of evacuation; and are moistening, aqueous, or aereal, of thin substance, and not astringent. 15. Narcotic, or stupifying the parts by its coldness, and not properly mitigating the pain, nor taking away the causes of the grief; yet stupor is somewhat less than insensibility, or the privation of sense: the same also is hypnotic, or somnific, and causeth sleep being taken, i. e. its subject, which doth vehemently refrigerate, i. e. in the fourth degree; so that it doth not only stupify the sense, but, being liberally taken, causeth death, as opium, and that not only by its exuperant quality, but also by a certain propriety of substance and its concurring essence, its narcotic vehemency being but little repressed by the mixture of hot correctors, though it hath some bitter parts. 16. Amyctic, metasyncritic, or rubefacient, causing redness, contrary to the former, causing pain, as in those things which heat and dissolve unity; of this kind also are escharotics, causing crusts, which are hotter, caustic or burning; not only hot and dry in the fourth degree, but also of a gross consistence; therefore, being fixed in any part, they excruciate and torment the same by their stiffness; like unto these, are those things that are septic or corrosive, which are vehemently hot and dry, but of thin parts and consistence; which therefore with a little pain and biting, or else without any sense of pain, eliuate the part, and are called also putrefactives;

putrefactives; hereto also belong the psilothra, extirpating the hair; and vesicatories, very hot, and of thin parts.

The third qualities arise from the mixture of the first and second, and are, 1. The Ecpuetic or suppurating, turning into matter contused flesh, and humours remaining in swellings, as in those things which are moderately hot, and next unto emollients, yet differing in this, that they have also an emplastic faculty, obstructing the pores, increasing the substance of heat, and not intending the quality; and are also called peptics or maturatives. 2. Sarcotic or generating flesh, as in those things which produce flesh in hollow ulcers, and fill the cavities, and are hot in the first degree, a little deterotive, and that without biting and astriction. Also moderately drying, *viz.* under the second degree. And such as impinguate, or make fat, are heating, nourishing, impulsive, attractive, retentive, or specific; as the seed of hemp, kernel of the Indian nut, and powder of charcoal. 3. Colletic or conglutinating, as in those things which dry in the second degree, and are in a mean as to those which generate flesh, and cicatrize; they are not absterotive, but astringent, and prohibit the flux of humours to the lips of wounds, ulcers, and fistulas; they are also called symphytics, traumatics, and enaima; and are temperate, and of a thick substance, stronger or weaker according to the person or part. 4. Eupolotic or cicatrizing, as in those which greatly dry and bind without biting, drinking the humidity of the flesh, and contracting the same, and covering with a thin callus like unto the skin; therefore do more dry than incarnatives or glutinatives, for they bind, contract, constipate, and indurate; and are of thick substance, and cold; there is also a sharp and biting eupolotic that consumes dead flesh, called cathairetic; and a third drying without astriction. 5. Porotic, or generating callus, by which broken bones are ferruminated and knit, and is neither bone nor flesh, but betwixt both, being a hard, dry, white, body; to the generation of which are required a convenient diet, and medicines applied which are emplastic and moderately hot, drying, thickening, hardening, and binding. 6. Diuretic, or provoking urine, as, 1. In those things that are moist and liquid, and of a thin consistence, and easy penetration, increasing the quantity of urine; so operate by accident. 2. In those things which purge and attenuate, and open the passages; some of which are cold, and of thin parts; sometimes expelling what sticks in the passages; which operate after a middle way, sometimes by accident, tempering exuperant heat which seizeth on the veins, and resolving the serous humidity, that the humours may be more easily attracted by the reins, and descend by the bladder. 3. In those things which purge the passages, and open the same, extenuate gross humours of the blood, and separate what is extenuated from the more gross parts: which the reins then easily attract and send away by the urinary passages; which kinds of diuretics are very hot

hot and dry, to wit, in the third degree, sharp, and of a very thin substance, coactive and separating. 7. Lithontriptic, or breaking the stone, dissolving and expelling the gravel, as in those things which are diuretic, hot, dry, and of thin parts; sharp, but more remisly, and somewhat bitter. Also some do it by incision and deterion, without much heat; some by asperity; and others by occult property. 8. Emmenonagogic, or drawing out the terms, as in those things which are hot and of thin parts, that they may concoct and digest crude humours, extenuate and incide the gross and rough, and remove obstructions by cleansing the passages: such as are all proper diuretics, which also promote the expurgation of the menses; and, if they are also stinking or bitter, they are more effectual; stinking things depressing the womb, and the bitter being purging. There are also accidental hysterics; as those which are analeptic, or strengthening after extenuation: or which refrigerate and humect the body dried by too much heat: to these also have affinity, those things which expel the secundine and dead-birth; especially those which are more strong, i. e. hot and of thin parts, stinking and bitter with acrimony, especially if taken in a great quantity and often. The proper are hot 2° or 3°, and dry 1° or 2°, of meanly gross substance, and bitter with acrimony: the contrary are the astringent. 9. Bechic, or helping the cough, as in those things which cause or stop the same: for those things which conduct to the expectoration of gross humours, do also cause coughing; but, on the contrary, those things which incrassate thin humours, stop and ease it: but those things are hot and of thin parts, and extenuating, which expectorate tough humours; yet there are also others which in some measure purge the breast, not much hot, nor very dry, but a little moistening, or at least lenifying what is exasperated; yet diuretics of the middle kind also are agreeable to the breast and lungs, which if they are cold, incrassate thin humours and stop coughing, and especially those that are narcotic, or stupifying. 10. Galactogenetic, or generating milk, as partly in meats, partly in medicines; as for meat, it is such as is eucynic and polytrophic, or of good juice and of much nourishment, and a little hotter and dryer if the blood be cold and pituitous; but more moist and less hot, if troubled with cholera. Medicaments causing milk, are of thin parts and hot, and of affinity to those things which properly provoke urine, yet most gentle: but those things which are more strong and provoke the courses, hinder the generation thereof by too much eliquation of the humours. Also things too cold, thickening, digesting, or drying, hinder the same. 11. Spermatogenetic, or generating sperm, as in those things which are hot, and not very dry, but flatulent, as also aliment of good juice, and whatsoever increaseth the quantity of blood. Also it is stimulated by things that are sharp, and hindered by things very cold and discutient. 12. Hydrotic, or provoking

voking sweat, as in things of thin parts, and hot; yet some are astringent and cold, working occultly. Also the cosmetic, for the skin, is extenuating, laxative, emollient, cleansing, and discussing; for the teeth, cleansing and binding; for the hair, healing, drying, and binding; for scurf, cleansing and discussing. Note, as for the pharmic or sternutatory quality, it is in those things that are acrimonious, causing an eruption of the expulsive faculty; as errhines, that are hot, nitrous, extersive, and sharp; as white pepper, hellebore, ginger, pellitory of Spain, castor, cloves, sneesewort, and euphorbium finely powdered. Also the apophlegmatic is in things hot and acrimonious; yet sometimes do it occultly, as in mastic, raisins, hyssop, organy, marjoram, pellitory of Spain, ginger, white and black pepper, and mustard-seed. The scholerobrotic is in things bitter and sharp, &c. as wormwood, coraline, &c.

The fourth qualities are such as follow the substance, or property of the essence; and are found out only by experience; and are therefore called occult, latent, and specific; as in poisons, theriac and alexiphamic remedies, roborating the expulsive faculty, and being contrary, emplastic, astringent, emetic, cathartic, and sudorific, with phlebotomy if need; amulets and cathartics, things antipathetic and sympathetic, as also appropriate to any part, or adverse unto the same; the greatest sign of which, according to some of the most learned authors, is signature. The poiotechnology, or way of finding out these qualities, is by manifest reason. 1. By osmellology, or odour or smell, which is either sweet, familiar unto the spirits of the brain, and a sign of heat, or stinking and offensive, cold or moist. The first is in hot bodies, of thin parts, among which there is difference according to the degrees thereof; but those things which are without odour are of a gross essence and humid, as those things which are salt and austere; also such things as are of a mordicant and bitter smell are hot, but those that smell like vinegar and acerb are cold; for in some things the sense of odours is like that of vapors, yet not of so safe conjecture, by reason of the inequality of substance; for most bodies are of an unlike consistence, of each of which parts odour sheweth not the temper, but where there are tenuous effluviums or vapours, whereof the sweet strengthen the heart, the rank excite the animal spirits, the stinking help the suffocation of the matrix. 2. By chromatology, or colour, which is either, 1. Lucid, exciting the animal spirits and drawing them outwards, as the white. 2. Or tenebrose, calling them inwards, and causing sleep, as the black. 3. Yellow, helping the jaundice. 4. Green, useful for the eyes; the white and pale show moistness of temper and imbecility. The

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yellow

yellow proceedeth from heat. The red and croceous, &c. show excessive siccitie, and caliditie or heat. The green and porraceous are signs of much moisture. Also to the white may the candid be reduced; to the yellow, the luteous, wax-coloured, croceous, golden, honey-coloured, citron, fox-coloured, and vituline; to the red, the light red, flaming, and sanguine, colour; to the purple, the violet, flesh-colour, and brunous; to the green, the prassive, herbaceous, enginous, and porraceous; to the sky-colour, the horn-white, grey, grifled, black-and-blue, ash-colour, pale, and murry; to the black, the dark. 3. By geuthmology, or fapors, or tastes, which, according to some, are, 1. More perceptible or manifest; as the simples, which are, 1. hot, first more hot, and so first of more thin parts, as the sharp; secondly, of more thin parts, as the bitter, nitrous and salt; secondly, less hot, as the sweet, and is diverse according to the diversity of tenuity and humidity. 2. Cold; first, of gross terrene parts. First, more gross, as the acerb; secondly, less gross, as the austere and astringent. Secondly, of subtile aqueous parts, and doubtful, as the acid. Thirdly, the mixed, as the vinous, compounded of the acid and sweet. 2. Less perceptible, and almost insipid. 1. Aqueous; first, more subtile, as the acquinsipid; secondly, more gross. First, glutinous, as the humilent; secondly, fat, as the oleous. 2. Terrene: 1. succulent, as the odoreous; 2. more dry, as the ligniterreous. The fapors or tastes are;

I. ACTIVE. 1. Bitter, wormwood-like, gallish, saline, or aloetic, which is contrary to the nature of living creatures, the taste whereof doth vellicate the tongue. It consisteth of terrene combust parts; of which some are more subtile; others more gross and terrene, exsiccated by exuperant heat, or coagulated by cold, as appears in opium and aloes. It is not nutritive, it openeth the mouths of the veins, causeth hemorrhages and thirst, makes the blood fluxible; it attenuateth, incideth, biteth, exasperateth, cleanseth, melteth, attracteth, yet more moderately drieth and heateth; it consumeth and resisteth putrefaction, drinking up supervacaneous humours, and resisting sweetnes: it is hot and dry in the second degree, *terra usita*; 2. Sharp, aromaticall, biting, septic or arsenical, hot, dry, and burning, pricking the tongue, and biting the mouth; it consisteth of thin, dry, and hot, parts, as pepper; onions, &c. If it be not vehement, and hot under the third degree; taken inwardly it doth penetrate, open, and attenuate thick humours; applied outwardly, it rarefieith the skin, and draweth forth humours; if it be hot above the third degree, it troubleth the head with thin vapours: if it be of a more gross essence, it is caustic, and causeth blisters and scabs: and, if it be of an adverse substance, it is septic and deadly: also.

also it is of quick operation, and strong ; it attracteth from remote parts, it separateth, corrodeth, incideth, heateth, burneth, and inflameth ; it resolveth, discuffeth, excoriateth, exulcerateth, and strongly inciteth to expuration ; if of more thin parts, it is diuretical ; if of thicker, caustic : it is more intense in drier bodies, and more remiss where there is an aqueous humidity. It is hot and dry, *ex aqua & terra attenuata*. 3. Acid, or ammonical. It penetrateth the tongue with its tenuity, yet without any manifest heat. It consisteth of tenuous, cold, and dry, parts, as vinegar, the juice of lemons, &c. It penetrateth and incideth no less than the sharp fapor, therefore it incideth, attenuateth, biteth, detergeth, referateth obstructions, repelleth, and drieth : and, by reason of its penetrating coldnes it repels all fluxions ; and by its siccit stopps all eruptions of blood. Also it helpeth nauleousnes, corrodeth and condensates without heat : it exasperates and resistis putrefaction. It is of doubtful qualities, fiery and aqueous, hot and cold, and of all contraries. It is cold and dry in the second degree, *aqua ignita cum halitu terreo*. 4. Nitrous, which is in a mean between salt and bitter : yet weaker than this, and more intense than the other : it is biting and corrodeth, as nitre. It openeth the belly, and purgeth the reins, *terra spiritibus compulsa*. 5. Salt, or serous. It corrodeth the tongue by exsiccation, yet heateth not much ; it consisteth in a mean matter with heat and drynes, and is generated of that which is terrene and dry, attenuate and preassate by heat with an aqueous humidity, so not altogether terrene, as salt : therefore it contracteth the pores, incideth, detergeth, digesteth, and drinketh up humidity, by its drynes, without any manifest sense of heat, and so resistis putrefaction. It openeth, biteth, exasperateth, abstergeth, cleanseth, troubleth, provoketh to expulsion, purgeth, subverteth the stomach, causeth thirst, drieth, deobstructeth, aggregateh, condenseth, roborateth, and contracteth. It is hot and dry in the second degree, and corrosive. 6. Sweet, fat, honey-like, or saccharine. It dilateth the tongue, and is pleasant, having no exuperant quality, and being in a mediocrity, as sugar and honey ; therefore it levigates what is exasperated, lenifies, maturates, concoctis, is anodyne, and only nourisheth ; also it digestis, rarefies, distributes, loosefis, filleth the liver, stoppeth the spleen, and is hot and moist in the first degree, and of teraqueous parts. 7. Acerb, astrictory, pontic, or aluminous. It contracteth the tongue, and doth unequally exasperate the same by exsiccation ; it is near to the austere, but more troublesome to the tongue, astringent, cold, and dry. The matter thereof is terrene and dry, without any manifest moisture, in which coldnes is exactly predominant with siccit, as services ; therefore as cold it repelleth fluxions ; as astringent it stoppeth the force of humours ; as dry, it doth coarctate, condense, and

and cicatrize wounds; as terrene, it incrassates humours, and condensates the superficies; as austere, it shuts, corrugates, and indurates. It resists poison, and is cold and dry in the second degree. 8. Austere, styptic, astringent, or vitriolate. It moderately bindeth the tongue and mouth, coarctates the same with a certain asperity, and doth in some measure refrigerate and dry. It consisteth in a mean matter, participating of that which is terrene and watery, in which frigidity is predominant, as medlars and wild pears, &c. It manifestly refrigerateth, extinguisheth, bindeth, and contracteth, moderately stops fluxions, and repelleth. It is subacerb, less cold and dry, and exasperating, stopping, roborating, and indurating, *terra spiritu commota*, as vitriol. The astringent is weaker, as quinces. *Mat. Med. sicc. crass.*

II. MEAN. 1. Oleous; it is fat, unctuous, and temperate; generated of that which is moist, aerious, and moderately hot, by elixation of the watery part, whereby it becomes more aerial, as oil. It is slow and weak in operation, stopping the gustic or tasting organs. It doth humect, lenify, and soften, loosen, obstruct, and cause flatulencies and nauseousness, having a certain obscure and remiss sweetness, and mean substance. 2. Humilent: the matter thereof is gross, tough, aqueous, in which the earth, being well mixed, causeth corpulency; and it is humid, little affecting the taste, more gross and crude than the sweet. It is emplastic, stopping the passages, conglutinates what is disjoined, lenifies what is exasperated, and doth incrassate, as mucilages, &c. *Mat. crass. frig. obscure.* 3. Acquinsipid. It is scarcely perceived by the tongue, hardly participating of any terrene siccity, and consisting in a crude juice; it is rather a privation than a savor: its matter is somewhat gross, yet not altogether terrene, dry, or astringent, but moistened with a certain humidity, which also is not exquisitely mixed by the activity of heat, as water. It is emplastic, stopping and obstructing, lenifying what is exasperated, and conglutinating that which is disjoined; and, although it hath some affinity to sweet, yet it differeth in this, that it consisteth in a matter a little more gross and crude: it refrigerateth, and doth more moisten, i. e. from the second to the third degree.

III. PASSIVE. 1. Ligniterreous, which is more gross, altogether terrene, and inactive; yet it hath some heat, spirit, and humidity, but exceeding little, as the *caput mortuum*, and dry bodies without juice. *Mat. crass. terra absque spiritu depressa prorsus terrea.* 2. Adoreous, most agreeing to our nature; it recedes from sweetness in this, because its matter, being inactive, is hardly perceived, and it is more gross; yet well tempered to a terrene equally-mixed siccity, which easily becomes

comes passive, and is apt for distribution and solidity, as bread-corn. *Materia equalis receptibilis.* 1. By aphelogy, or the tactile quality or touch: so crassitude is a sign of the abundance of terrestrial parts, or humid and congealed, tenacity of the fiery and aerious; density of exsiccation or congelation; rarity of dryness; hardness of siccity and earthiness, except caused by the repletion of humours; softness of humidity; gravity is the companion of density, levity of rarity, clamminess of humidity, aridity or friability of siccity, smoothness of an aerious or aqueous humidity; asperity of siccity. 2. By allotropology, or disposition, or mutability: so, that which the soonest receiveth heat is counted hot; and that most cold which is soonest congealed. 3. By peperiology, or age; so, for the most part, those things that are young, more humid; the old, more dry; also, whilst they are growing and immature, they have an austerity and acerbity; so, cold. 4. By phyteutriology, or the place of growth; so plants growing by lakes are for the most part of a cold and moist temperature; the marshy, cold and somewhat dry: the fluviatile, dry and very hot; the marine, cold and dry; those of a fat soil are hot and moist, or temperate therein; those of an hungry ground, hot and dry: those of a mean earth, tepid and suitable to man's nature; those of a sandy ground, hot and dry, and of thin parts; those of a doubtful growth, are of a mixed temperature; the amphibious, if growing in springy places, cold and dry; if in littoral and marine, hot and dry; the mountain-plants are dry, hot, and of subtile parts; the field, moderately hot and dry; they that grow in hollow places, are cold and moist; the hilly, temperate; those that grow wild, are colder and drier than the domestic; if of the same species, the domestic are milder and more weak. 5. By protergasiology, or the operations of the first four qualities, as above-said. 6. By experience, which in certitude exceeds all the rest, and must be made with a simple body, without any external quality, and that in a temperate subject; in all which, that must be distinguished which is done *per se* from that which is *per accidens*. Thus of the way of finding out the manifest qualities, i. e. of the first; after which the second are known, as arising from the first; but especially by sapor, or taste.

Now follow the occult qualities; which are discovered, 1. By phytognomy or signature, i. e. phytopactical or external, either in form, colour, or property; as representing the parts of man's body, the humours, or diseases; and so the appropriations are as follow. For the head in general: walnuts, piony, poppy, squills, larch-tree, its agaric, and turpentine, Indian nut, and flowers of the lily of the valley. For the brain: wood-betony, sage, rosemary, lavender, marjoram, prim-

roses, cowslips, bears' ears, lily of the valley, and mistletoe. For restoring hair; quinces, mosis, and maiden-hair. For the eyes; fennel, vervain, roses, celandine, rue, eyebright, clary, and hawkweed, herb Paris, grains, and anemony. For the ears; assarabecca, ground-ivy, ivy, poplar-tree, nightshade, sow-fennel, and sow-thistle. For the nose: wake-robin, flower de luce, horsetail, shepherd's purse, willow, bistort, tormentil, cinquesoil, and sow-bread. For the mouth in general: medlar, mulberries, mints, purslain, and golden rod. For the scurvy: scurvy-gras, small houseleek, aloes, fumitory, and cresses. For the teeth; pine, pomegranate, mastic, master-wort, coral, coral-wort, rest-harrow, henbane, and wild tansey. For the dryness of the mouth: fleawort. For the diseases of the throat, roughnes, quinsey, king's evil, &c. throat-wort, date-tree, winter-green, horse-tongue, figwort, archangel, foxglove, orpine, pellitory of the wall, wheat, barley, garlic, liquorice, fig-tree, hyssop, ragwort, plantane, columbines, cudweed, and Jews ears. For shortnels of breath, coughs, expectorations, hoarsenes, &c. elecampane, almond-tree, vines, reeds, sugar-cane, jujubes, sebestens, scabious, coleworts, nettles, and turnips. For contracting women's breasts: lady's mantle and fanders. For breeding milk: aniseed, nigella, mallows, dill, rampions, periwinkle, and lettuce. For swollen breasts; fennel-giant, gourds, basil, beans, lentiles, and lilies. For sore nipples: dock-cresses. For the lungs, stoppings, consumptions thereof, &c. horehound, lungwort, tobacco, sundew, hedge-mustard, colt's-foot, woodbine, mullein, cowslips of Jerusalem, fanicle, polypody, whortleberries, and sweet Cicely. For the heart, qualms, faintnes, &c. angelica, saffron, borage, violets, strawberries, wood-sorrel, balm, marigold, swallow-wort, goat's rue, viper's grass, pomecitrons, gentian, scordium, burnet, avens, cloves, clove gillyflowers, lignum aloes, cinnamon, and viper's bugloss. For stiches, and pains in the sides: carduus benedictus, our lady's thistle, camomile, sweet trefoil, melilot, oats, valerian, stitch-wort, flax, and linseed. For purging the stomach: wormwood, myrobolans, groundsel, radish, black alder, oily nutben, senna, daffodils, white-hellebore, and purging cassia. For breaking wind: caraways, cummin, camel's hay, ginger, galanga, cardamoms, pepper, nutmeg, coriander, and orange. For cooling and strengthening the stomach: apples, pears, peaches, apricots, plums, cherries, gooseberries, currants or ribes. For the liver: rhubarb, turmeric, agrimony, liverwort, succory, alecost, maudlin, docks, forrel, beets, smallage, cleavers, and chickweed. For the dropsy: elder, soldanella, briony, mechoacan, jalap, broom, ash, ague-tree or fassafras, palma Christi or great spurge, glasswort, spurge-laurel, toad-flax, and bastard marjoram or organy. For the spleen: dodder, black hellebore, tamarinds, spleen-wort or miltwaste,

miltwaste, heart's tongue, fern, capers, tamarisk, germander, calamint, poley mountain, and lupins. For the reins, bladder, stone, and strangury, &c. asparagus, parsley, marshmallows, goat's thorn, spikenard, sweet-smelling flag, cypress or English galingale, hops, knotgrass, parsley-pert, faxifrage, dropwort, gromel, onions, winter cherries, dog's grass, butcher's broom, chervil, brooklime, hawthorn, lemons, cypress-tree, kidney-wort, kidney-beans, oak, buck's-horn plantane, samphire, fraxinella, and alheal. For the cholic: bay-tree, holly, Juniper, olive-tree, coloquintida, and bindweed. For the worms: centaury, lovage, tansey, lavender-cotton, carrots and parsnips, spignel, bishop's weed, English worm-feed, leeks, and horse-radish. For looseness, the bloody flux, &c. shumach, myrtle, cistus, blackthorn, bramble, teasel, rice, flixweed, pilewort, and water-betony. For provoking lust: artichokes, sea-holly, potatoes, skirrets, pease, rocket, mustard, cotton, fistic-nut, chesnut, chocolate, satyrions, and dragons. For abating lust: agnus, or the chaste-tree, hemp, water-lily, hemlock, camphire, and tutsan. For provoking the terms: mugwort, pennyroyal, southernwood, savory, thyme, alexander, and anemony. For stopping the terms and the whites: comfrey, mousear, yarrow, mede sweet, adder's tongue, lunaria, trefoil, moneywort, darnel, flower-gentle, blites, dragon-tree, beech-tree, and hafel-nut-tree. For the womb: mother-wort, feverfew, calamint, burdock, butterbur, orach, assafœtida, and cow-parsnip. For expediting childbirth: birthwort, mercury, madder, dittany, dittander, pepperwort, holm oak, and its chermes. For expelling the dead child and after-birth: ground-pine, savin, and birch-tree. For ruptures or burstnes: rupterwort, thorough-wax, Solomon's seal, balsam-apple, dove's foot, or crane's bill, and elm. For the French pox: guaiacum, china, and sarsaparilla. For the swelling in the groin: starwort, and herb Paris. For green wounds and old ulcers: St. John's wort, arse-smart, bugle, self-heal, faracen's confound, loose-strife, daifly, and speedwell. For drawing out splinters: pimpernel. For fellons: woody nightshade. For surfated feet: lady's bedstraw. For excrescences: agaric, galls, and other excrescences of trees. For the jaundice: celandine, saffron, and centaury. For pimples, tetter, and ringworms: the bark of the birch-tree, and tree-lungwort. For spots: garlic, wake-robin, friar's cowl, arse-smart, and spotted lungwort. For the polypus: the root of the smaller celandine, and of polypody. For the scab: polypody and savin. For yellow choler: as aliment, saffron, beets, figs; as medicine, aloes, fenna, wormwood-flowers; spurge, coloquintida, and rhubarb, &c. For prassine choler: those things which have a green and herb-like colour, as blites and orach. For pale choler: briony, having pale flowers. For melancholy: black blite, borrage, bugloss, &c. For phlegm: gourds and lettuce. For mixed humours; things of mixed colour.

II. Astrological or internal, of which the appropriations are, to the planets. 1. To the Sun, which is a benevolent planet, moderately hot and dry, a friend to Jupiter and Venus, and an enemy to the rest; and as it were the heart of the microcosm, and therefore it produceth the vital spirits thereof, by which the whole universe is cherished; and it is the fountain of peculiar influences, by which it particularly helpeth things familiar, and hindereth what is contrary to itself. It governeth the heart and arteries, the sight cold and moist, and eyes; the sinews and the brain with the Moon, and also with Mercury. Of sickneses, swoonings, cramps, the ophthalmmy, watering eyes, and the cardiac with Jupiter: pimples, heart-burning, tremblings, faintings, tympanies, diseases of the mouth, convulsions, all diseases of the heart, sinking breath, catarrhs, and putrid fevers; it governs the vital faculty, and the taste which is hot and moist; also the attractive virtue with Mars, it being hot and dry, and the digestive hot and moist: under which are, angelica, ash-tree, bawm, one-blade, burnet, butter-burr, camomile, celandine, centaury, eye-bright, St. John's wort, lovage, marigolds, misletoe, piony, St. Peter's wort, pimpernel, rosa solis, rosemary, rue, saffron, tormentil, turnsol, viper's bugloss, and walnut-tree: as also all spices, forrel, wood-forrel, mallow, borage, marjoram, dittany, gentian, ivy, elecampane, lavender, bay-tree, olive-tree, mints, date-tree, oranges, pome-citrons, thyme, vine-tree, wood of aloes, zedoary, mastic, frankincense, and myrrh. 2. To the Moon, which is a planet in a mean between good and bad; moderately cold and moist, a friend to Jupiter, Saturn, Venus, and Mercury, and an enemy to the other two; and is correspondent to the brain, and therefore sympathetic with the nervous parts and animal spirits; or it is the generatory of humidity, by which the whole universe is moistened: and is the fountain of peculiar influences by which primarily and peculiarly it doth affect things familiar to itself, and secondarily things agreeing to Saturn, Jupiter, Venus, and Mercury, as being benevolent unto the same, or (as some) it is as it were the liver of the microcosm. Under it are also the stomach, bowels, and bladder, as some say, with Saturn. Of sickneses, the cholic, phlegmatic imposthumes, all kinds of oppilations, and the epilepsy, with Mars and Mercury; the palsey with Saturn, and the menstrual sickness with Venus; also apoplexies, palsies, belly-ach, diseases of the testicles, bladder, and genitals; stopping and overflowing of the terms in women, dropfy, fluxes, all cold and rheumatic diseases, the gout, sciatica; worms in the belly, hurts in the eyes, surfeits, rotten coughs, convulsions, king's evil, small-pox and measles, crude humours, lethargies, and all phlegmatic diseases: also the expulsive faculty, which is cold and moist. Under which are, adder's tongue, cabbages, coleworts, columbines,

water-

water-cresses, duck's-meat, yellow water-flags, flower-de-luce, fluellin, ivy, lettuce, water-lilies, loosestrife with and without spiked heads, moonwort, mouse-ear, orpine, poppies, purflain, privet, rattle-graſs, white roses, white faxifrage, burnet faxifrage, wall-flowers, or winter gillyflowers, and willow-tree; as also chaste-tree, winter cherries, garlic, reeds, brooklime, onions, camomile, frogstools, hyſſop, mastic-tree, mandrake, nutmegs, walnuts, lime-tree, water-plantain, turnips, houseleek, and common leeks. 3. To Saturn, which is a malignant planet, diurnal, in masculine, and very cold; a friend to Mars, and an enemy to the rest, and answereth to the spleen of the microcosm: yet ſome ascribe it to the head, as also Jupiter and Mars. Some ſay also, that Saturn ruleth the right ear, also the bones, fundament, and the retentive faculties, cold and dry, in the whole body; and the bladder with the Moon. Of ſickneſſes; the leproſy, cankers, quartan ague, palsy, consumption, black jaundice, iliac paſſion, dropſy, catarrh, gout in the feet, and ſcrophula; as also apoplexies, tooth-ach, all melancholy diseases, cold and dry, trembling, vain fears, fancies, gout, dog-like appetite, hemorrhoids, broken bones, diſlocations, deafneſſeſs, pain in the bones, ruptures, (if he be in Leo or Scorpio, or in an evil aspect to Venus,) the chin-cough, pain in the bladder, all long diseases, melancholic madness, fear or grief; he governs the memory also, which is cold and dry; and the hearing likewiſe. Under it are barley, red beets, beach-tree, bifoil or tway-blade, bird's-foot, bistort or ſnake-weed, blue-bottles, buckhorn-plantain, wild campions, pilewort, cleavers or goosegraſs, clown's woundwort, comfrey, cudweed or cotton-weed, ſciatica cresses, croſſwort, darnel, dodder, epi-thymum, elm-tree, oſmond royal, flea-wort, flixweed, fumitory, ſtinking-gladden, goutwort, winter-green, hawkweed, hemlock, hemp, henbane, horſetail, knapweed, knotgraſs, medlar-tree, moſs, mullein, nightshade, polypody, poplar-tree, quince-tree, rupture wort, rushes, Solomon's ſeal, Saracen's conſound, ſervice-tree, cete-rach or ſpleenwort, tamarisk, melancholy thiſtle, blackthorn, thorough-wax, tutſan or park (leaves and wood); as also aconite, chaste-tree, parsley, ſtinking-tree, aphodil, starwort, orach, ſhepherd's purse, capers, cumming, cypruſ, fern, black hellebore, great dock, mandrake, mulberry-tree, opium, herb truelove, pine-tree, favin, ſage, ſenna, and ſengreen. 4. To Jupiter, which is a benevolent planet, moderately hot and moist, a friend to all the rest except Mars; anſwering to the liver, and cheriſhing the faculties thereof by its influence. Some affirm also, that he rules the lungs, ribs, fides, veins, blood, and digestive faculty; the natural virtue of man, as also the griftles and ſperm with Venus; the arteries and the pulse. Of ſickneſſeſs; the peripneumony, apoplexy, pleurify, cramp, the cardiac with the

Sun, quinsey, numbness of the finews, and stinking of the mouth ; all infirmities of the liver and veins, apytumes about the breast and ribs, all diseases proceeding from putrefaction of blood and wind, fevers, and other diseases ; he governeth the blood, hot and moist : so the judgment. Under which are, agrimony, alexander, asparagus, avens, bay-tree, white-beets, water-betony, wood-betony, bilberries, borage, bugloss, chervil, sweet cicely, cinquefoil, alecost or costmary, dandelion, docks, bloodwort, dog's or quick-graſs, endive, hart's tongue, hyſlop, fengreen or house-leek, liverwort, lungwort, sweet maudlin, oak-tree, red roses, fauce alone or jack by the hedge, ſcurvy-graſs, ſuccory, and our lady's thifte ; as also almonds, walnuts, barberries, calamint, cherries, cornel-tree, hound's tongue, beans, beech-tree, strawberries, ash-tree, fumitory, liquorice, barley, white lily, flax, darnel, mace, apple-tree, mints, mulberries, myrobolans, nuts, basil, olive-tree, organy, raisins, pine-tree, peach-tree, roots of piony, poplar-tree, purflain, plum-tree, ſelf-heal, pear-tree, rhubarb, currants, madder, ſervice-tree, ſpike, confound, wheat, violets, vine-tree, mastic, storax, ſugar, and all other ſweet things. 5. To Mars, which is a planet exceeding hot and dry, a friend to Venus, and an enemy to all the rest ; cheriſhing the bladder and gall of the microcosm. Some ſay he rules the left ear, apprehenſion, and cauſeth valour ; as also the veins, genitalis, teſticles, and the reins, with Venus. Of fickneſſes ; the pestilence, hot fevers, yellow jaundice, ſhingles, carbuncles, fistulas, choleric fluxes, fevers tertian and quotidian, all wounds, especially in the face ; and the epilepſy with the Moon and Mercury ; also megrims, burning, ſcalding, ringworms, blifters, phrenzy-fury, hairbrains, ſudden diſtempers of the heart, the bloody flux, fistulas, diseases in the genitalis, ſtone in the reins and bladder, scars, pock-holes, hurts by iron and fire, the calenture, St. Anthony's fire, and all diseases of choler and paſſion ; he governs ſinelling alſo, which is hot and dry ; ſo the attractive virtue. To which belong, arſemart, affarabecca, barberry-buſh, ſweet basil, branble-buſh, briony, brooklime, butcher's broom, broom, broomrape, crowfoot, wake-robin, crane's bill, cotton-thifte, toad-flax, furze-buſh, garlic, hawthorn, hops, madder, masterwort, muſtard, hedge-muſtard, nettles, onions, pepperwort or dittander, carduus benedictus, radiſh, horſe-radiſh, rhubarb, raphontic, baſtard rhubarb, thifte, ſtar-thifte, tobacco, woolly thifte, treacle-muſtard, mithridate-muſtard, dyer's weed, and wormwood ; as also birthwort, camelion thifte, cornel-tree, danewort, eſula, euphorbium, ſpearwort, hellebore, ſpurge-laurel, medlars, monk's-hood, plantane, leeks, plum-tree, oak-tree, tormentil, nettle, ſcammony, and all poiſonous things. 6. To Venus, which is a be-nevolent planet, nocturnal, ſeminine, moderately cold, a little more intenſely moist, a friend to the Sun, Mars, Mercury, and the Moon ; an enemy to Saturn, and

having

having an influence upon the genitals and urinary parts ; as also upon the throat, women's breasts, and milk therein ; the loins, the liver, and sperm with Jupiter, and the reins with Mars. Of sicknesses ; all diseases of the matrix, gonorrhœa, flux of urine, priapism, weakness of the stomach and liver, French pox, flux of the bowels, and the menstrual sickness, with the Moon ; and all diseases of the genitals, reins, and navel ; and all diseases by immoderate lust, weakness in the act of generation, all sorts of ruptures ; all diseases of the urine, and iliac passion ; and governs the procreative virtue, and the feeling, with Mercury, which is of all qualities. Under which are, alehoof or ground-ivy, black alder-tree, apple-tree, stinking orach, archangel or dead nettles, beans, lady's-bedstraw, birch-tree, bishops-weed, blights, bugle, burdock, cherry-tree, winter-cherries, chickweed, chick-pease, clary, cock's-head, colt's-foot, cowslips, daisies, devil's bit, elder, dwarf-elder, eringo, featherfew, figwort, filappendula, fox-gloves, golden-rod, gromewel, groundsel, herb-robert, herb-truelove, kidney-wort, lady's-mantle, mallows, marshmallows, mercury, mints, motherwort, mugwort, nep, parsnip, peach-tree, pear-tree, peonyroyal, periwinkle, plantane, plum-tree, primroses, ragwort, rocket, winter-rocket, damask-roses, wood-sage, fanicle, self-heal, soapwort, sorrel, wood-sorrel, sow-thistles, spignel, strawberries, garden tansey, wild-tansey or silverweed, teasels, vervain, vine-tree, violets, wheat, and yarrow ; as also asphodil, maidenhair, coriander, sow-bread, figs, ground-ivy, flower-de-luce, all kinds of lilies, melilot, pomegranates, daffodil, stone-parsley, sweet-pease, roses, sanders, satyrium, wild thyme, thyme, vervain, violet, laudanum, musk, amber, and all kinds of perfumes. 7. To Mercury, which is a mutable planet, good with the good, and bad with the bad ; hot with the hot, and cold with the cold ; dry with the dry, and moist with the humid ; a friend to Saturn, Jupiter, Venus, and the Moon, and an enemy to Mars and the Sun, representing the lungs, which it doth sympathetically strengthen by its influence ; yet some appropriate it to the middle of the belly ; some say also that he rules the brain, especially the imagination, hot and dry, tongue, hands, feet, and irrational parts, and that alone he maketh apprehensive, desirous of knowledge, and very fickle ; as also that he governeth the spirits, memory, and brain, with the Sun and Moon. Of sicknesses ; madnes, los of the common sensies, doting, lisping, and stammering, coughs, hoarsenes, and the epilepsy, with the Moon and Mars ; almost all diseases of the brain ; as vertigoes, &c. all diseases of the lungs, as asthmas, phthysicks, &c. all imperfections of the tongue and memory, gout, stoppings of the head, dumbness, epidemical diseases, and hurts of the intellect. Under it are, calamints or mountain-mint, carrots, carraways, dill, elecampane, fern, fennel, hog's fennel, germander, hafel-nut tree, hoarhound, hound's tongue,

tongue, lavender, liquorice, wall-rue, maiden-hair, golden maiden-hair, sweet marjoram, mclilot, money-wort, mulberry-tree, oats, parsley, cow-parsnip, pellitory of the wall, champity or ground-pine, rest-harrow or cammock, samphire, summer and winter savory, scabious, sinallage, southernwood, meadow trefoil, garden valerian, and honey-suckles or woodbine; as also marshmallows, aniseed, columbine, daisy, camomile, cubebs, beans, fumitory, walnut-tree, juniper-tree, mercury, navew, cinquefoil, stone-parsley, butter-bur, burnet, peony, lungwort, elder, speedwell, wild thyme, and colt's-foot. All which are said to cure diseases by sympathy, so each planet cures its own; or antipathy, so the contrary. And are under the planets primarily and directly, or immediately, or secondarily, by the respective amity of the rest. Note, that the solar plants have a good shape, yellow flower, good smell and taste, and in open meridional places. The lunar are thick-leaved, juicy, waterish, sweet-tasted, soon grow up, in waterish places. The Saturnine, ill-shaped, ill-smelling, binding taste, lean, in filthy, woody, solitary, dark, places. The jovial, of good taste and smell, red or sky coloured, oily substance, plain-leaved, in fat places. The martial, rough and prickly, reddish, of burning taste, in dry places. The venereal, white-flowered, of clammy juice, of sweet taste, pleasant smell, smooth-leaved, not laciniate. The mercurial, verticolor, flowered, coddled, arenary.

II. To the signs, as followeth, amongst which there are four degrees, after the manner of the four first qualities; so they are appropriate, 1. To Aries, which is a masculine fiery sign, or hot and dry, sympathetical to the head. Some say it is eastern, masculine, choleric, governeth the face, eyes, ears, &c. and whatever is above the first vertebra of the neck. Of sicknesses; the apoplexies, mania, spots and wounds in the face, abortifements, and other impetuous diseases; ringworms and morphew's; also the small-pox and measles, polypus, and all diseases in the head. Thus in the first degree, red mugwort, betony, succory, larkspur, dane-wort, mints, peach-kernels, butter-bur, wild thyme, colt's-foot, and fluellin; and are to be gathered in the end of dog-days, after the full of the Moon. In the second degree, sperage, St. John's wort, milfoil, plantain, and peony; and are to be gathered, the Sun and Moon being in Cancer. In the third degree, agaric, garden spurge, mezereon tree, wild gourds; spurge, colt's-foot, gentian, privet, nutmeg, palma Christi, elder, and sarsaparilla; and are to be gathered betwixt St. James's and St. Lawrence's day. In the fourth degree, southernwood, calamint, capers, cinnamon, white hellebore, marjoram, hoarhound, wild creffes, rosemary, turbith, and spike; and are to be gathered partly in April, partly in September,

tember. 2. To Taurus, which is a terrestrial feminine sign, cold and dry, sympathetic to the neck and throat. It is south, feminine, and melancholic, governing the voice, seven vertebræ of the neck, and channel-bone. Of sicknesses: quinsies, scrophulas, catarrhs, and hoarseness; and all diseases incident to the throat. Thus, in the first degree, betony, miltwaste, ground-ivy, the root of white lilies, mints, daffodil, polypody, roses, rosemary, valerian, and violets; and mollify the tumours of the jaws and spleen. In the second degree; maidenhair, winter cherries, columbines, ivy, Solomon's seal, oak-tree, and mistletoe of the oak; and help wounds. In the third degree, bugloss, our lady's thistle, hound's tongue, agrimony, the lesser dock, organy, stone-parsley, oak-tree, cinquefoil, sanicle, figwort, tormentil, periwinkle, and silver-weed: and are traumatic. In the fourth degree, mouse-ear, great burdock, wild betony, great celandine, ash-tree, mallows, lungwort, scabious, and ground ivy; and have antipathy with the sublunaries which are under Libra and Scorpio, but sympathetic with those that are under Cancer and Sagittarius. 3. To Gemini, which is a masculine sign, airy, but hot and moist, possessing the shoulders; it is west, masculine, sanguine, governing the arms and hands, with the parts belonging thereunto. Of sicknesses: phlegmous, fellons, and others of blood there; and all such diseases as are incident to the hands, arms, and shoulders, really or by accident. Thus, in the first degree, aniseed, marshmallows, bugloss, borage, fennel, hyssop, stone-parsley, self-heal, and wall-rue. In the second degree, great burdock, bugloss, fern, white lime-tree, turnips, &c. In the third degree, chickweed, wake-robin, mace, and dead nettle. In the fourth degree, sorrel, germander, camomile, celandine, mugwort, and rhubarb; and they have an antipathy with the sublunaries of Capricorn, and sympathy with those of Libra and Aquaries. 4. To Cancer, which is a feminine sign, watery, cold and moist, sympathetic to the breast and lungs, as also to the ribs and spleen, and cureth the diseases thereof. It is north, feminine, and phlegmatic, governing the liver also. Of sicknesses; the alopecia, watery eyes, rheums, scabs, and the leprosy; as also all imperfections of the breast, stomach, and liver, and incident thereto. Thus, in the first degree, chickweed, cabbage, thistle, the flowers and fruit of beans, lady's bedstraw, turnips, rampions, sage, and figwort. In the second degree, strawberry-tree; cones of the fir-tree and pine, comfrey, nightshade, turpentine, and mistletoe. In the third, brooklime, foxgloves, cudweed, rushes, cresses, seed of stone-parsley, purslain, willow, saxifrage, and stonecrop. In the fourth degree, water-lily, piony, houseleek, and coral; and are antipathetic to the sublunaries of Sagittarius, and sympathetic to those of Taurus and Libra. 5. To Leo, which is a masculine sign, fiery, or hot and dry, governing the heart

and stomach. It is of the east, masculine, choleric, ruling the back, sides, and midriff, with Virgo, and the twelve vertebrae of the breast, pericardium and appetite. Of sicknesses; the cardiac passion, the trembling of the heart, and swooning: all diseases thereof, and of the back, and all diseases of colour and aduision. Thus, in the first degree, basil, saffron, cypress-tree, carnations, hyssop, lavender, water-plantain, fundew, sea-bindweed, and thyme. In the second degree, wild angelica, tway-blade, centaury, galingale, gentian, and devil's bit. In the third degree, stinking mayweed, carrot, mints, garden cresses, pennyroyal, crowfoot, and nettles. In the fourth degree, birch-tree, box, broom, and bay-tree; the first are to be gathered, the Sun being in Pisces, the Moon in Cancer. The second sort in the beginning of May before sunrising, or in the end of August; or the Sun being in Taurus, and the Moon in Gemini. The third, the Sun being in Leo, and the Moon in Virgo; and the last quadrature; or for refrigeration, the Sun being in Taurus, and the Moon in Gemini. The fourth, the Sun being in Pisces, and the Moon in Aquaries, or both. 6. To Virgo, which is a feminine sign, earthy, cold, dry, and sympathetic to the liver, intestines, and belly. It is south, feminine, melancholic; governing the midriff with Leo, the navel, spleen, omentum, and all that belong to them. Of sicknesses; the cholic and the iliac passion, oppilations of the spleen, and black jaundice; also all diseases incident to the bowels, meseraic veins, omentum, diaphragm, and spleen. Thus, in the first degree, sorrel, wood-sorrel, burdock, succory, plantain, pear-tree, and wild sage. In the second degree, white beets, medlars, Solomon's seal, and briar-bush. In the third, birthwort, bugle, fleabane, self-heal, and oak-tree. In the fourth, carduus benedictus, small centaury, black alder-tree, adder's tongue, sloe-tree with all its parts, fruit and flowers, tormentil and bistort. 7. To Libra, which is a masculine sign, airy, hot, and moist, sympathetic to the reins and bladder. It is west, masculine, sanguine; governing the navel and buttock with Scorpio. Of sicknesses; all filthy scabs and spots in the face, loss of sight, cankers, hemorrhoids, the leprosy, alopecia, and cholic; all diseases of the reins, wind, and blood corrupted. Thus, in the first degree, all sorts of daisies, bugle, feverfew, cowslips, goat's beard, and water-parsnip. In the second degree, marshmallows, camomile, mistletoe, martagon, mallows, line-tree, vervain, and silver-weed. In the third degree, calves' snout, mugwort, nut-tree, and wall-rue. In the fourth degree, chickweed, great celandine, black mints, scabious, figwort, and houseleek. 8. To Scorpio, which is a feminine sign, watery, cold, and moist, and sympathetic to the genitals. It is north, feminine, and phlegmatic, governing the fundament and bladder with Libra. Of sicknesses: the former and French pox, and all diseases that infect the privities of

both

both sexes, and bladder. Thus, in the first degree, croffwort, hawthorn, and service-tree; as also all similes of the first degree of Cancer gathered in October. In the second degree, ash-tree, all sorts of apples, and plum-tree. In the third, barberry-tree, box, feverfew, and soapwort; hereto belong all herbs of the second degree of Cancer. In the fourth, great red beets, mercury, daffodil, and ribes. 9. To Sagittarius, which is a masculine sign, hot and dry, sympathetic to the loins, &c. It is east, masculine, choleric, governing the thighs and hips. Of sicknesses; hot fevers, blear eyes, falls, and all diseases in the thighs and hips. Thus, in the first degree, comfrey, onion, radish, figwort, flowers of lime-tree, sesanuin, and ver-vain. In the second degree, garlic, wild angelica, henbane, lovage, and leaves of willow-tree. In the third degree, red beet, assarabecca, celandine, saffron, fern, ground ivy, madder, devil's bit, and turmeric. In the fourth degree, gum-thistle, cresses, and white vine. 10. To Capricorn, which is a feminine sign, terrestrial or earthy, cold and dry, sympathetic to the knees and nerves. It is south, feminine, melancholic, governing the hams, and what belongeth to them. Of sicknesses, aches in the knees, deafness, loss of sight and speech, itch and scabs, and foulness of the skin; all diseases in the knees and hams, and all diseases of melancholy, and scirrhuses. Thus, in the first degree, marigold; black cherries, elecampane, mulberry-tree, bramble-bush, and worts. In the second degree, blackberries, mullein, and garden-endive. In the third degree, acorus, wake-robin, shepherd's purse, comfrey, gourds, galingale, garden-mallow, and all kinds of sow-thistles. In the fourth degree, hellebore, henbane, mandrake, monk's hood, herb true-love, savin, nightshade, and staves-acre. 11. To Aquaries, which is masculine sign, aerious, hot and moist, sympathetic to the legs. It is west, masculine, sanguine, governing what belongs to the nerves. Of sicknesses, quartan fevers, the black jaundice, swellings of the legs, and varices; also all diseases incident to the legs and ankles, all melancholy coagulated in the blood. Thus, in the first degree, angelica, wild carrot, fig-tree, flowers of the ash-tree, ground-ivy, walnut-tree, melilot, sanicle, Solomon's seal, and periwinkle. In the second degree, larkspur, cummin, dodder of thyme, crane's bill, clotbur, rose-root, wall-rue, wild sage, and white nettle. In the third degree, agrimony, mouseear, clary, mercury, saxifrage, and dragon. In the fourth degree, the leaves of assarabecca, motherwort, hemlock, and medlars. 12. To Pisces, which is a feminine sign, aqueous, cold and moist, and sympathetic to the feet. It is north, feminine, phlegmatic, governing all that belongs to the feet. Of sicknesses; gouts, scabs, the leprosy and palsy, lameness, kibes, diseases incident to the feet; all diseases of salt phlegm, mixed with humours; the small pox, measles, and all cold and moist diseases. Thus, in the first degree, long birthwort, cabbage,

bage, gourds, elecampane, myrobolans, navew, water-lily, purslain, and turnips. In the second degree, artichokes, calves' snout, bluebottle, and golden flower-gentle. In the third degree, nigella, garden and wild poppy, and sow-thistle. In the fourth degree, hemlock, henbane, monk's hood, horned poppy, and white nightshade.

Here let it be remembered, that in all these the sympathy and antipathy of the signs and planets is to be observed; both essential by house and exaltation, temperature, or quality, or conditions; or else accidental, by configurations; of which some are obnoxious and hateful, as a quartile and opposition; as also the conjunction of bad planets: others are healthful, as a sextile and trine, and the conjunction of good planets. Next consider, what diseases every plant causes distinctly of himself, and what under the signs of the zodiac; what parts the planets generally rule, and what of the signs they are under, and houses of the heaven in a celestial scheme; and what part each planet particularly rules, according to his transit through each sign. Then may the nature and kind of the disease be found out by the figure of the decumbiture. 1. By the houses of heaven; of which, the sixth, seventh, and twelfth, signify diseases. 4. By the nature of the signs; as fiery, earthly, airy, and watery. 3. By the planets, and their aspects. The part may be found out by considering the government of the sign: masculine planets signify the right side, and the feminine the left, and afflict where ruling. As for the length of the disease, it may be found out by the nature of the planets, as followeth: Saturn causing long sicknesses; the Sun and Jupiter, short; Mars shorter, but acute; Venus, mean; Mercury, inconstant, as aspected; the Moon gives such as often return. Whether it shall end by life or death, well or ill, may be conjectured from aspects. The Sun giveth vital heat to the creation, the Moon giveth radical moisture, Saturn fixeth and putrifieth this, Jupiter turneth it into nourishment, Mars calcines it, Venus makes it fruitful, and Mercury makes it rational. As for elements, the fire preserves the earth, that it be not drowned or destroyed by a continual flux of water upon it; the air preserves the fire, that it be not extinguished; the water preserves the earth, that it be not burned; and the earth is the decticon of all. The air and fire are thin and active; water and earth, thick and passive, with a proportional difference; or, as others say, air hath motion, thinness, and darkness; fire hath the two first, and brightness; water hath motion, darkness, and thickness; the earth hath the two last, and quietness. Also the Sun is chief in chronic diseases; and the Moon in the acute with the ascendant. The occult qualities are found out by peiralogie, or experience, which is more sure and safe.

II. Next follow those things which are more remote, that concern plants and other medicinals, so as commonly to be compounded therewith. As 1. The topology, or place of gathering them; thus, 1. Herbs are to be gathered in mountains, hills, and plain places; in those that are highest especially, and exposed to the sun and winds; except some few, as germander and ground-pine, which are more odiferous, and frequent on hills: but those that grow only in plain places are to be gathered in more dry places, and more remote from lakes and rivers, except they delight in more moisture, as water-caltrops, water-lilies, &c. 2. Flowers are to be gathered in those places in which there are the best plants. 3. So fruits. 4. And seeds. 5. So roots also. 6. Woods are to be taken from trees where they are well grown. 7. Barks, where their plants are best. 8. Juices are to be taken from the best herbs, chiefly the well-grown and greater, as being less excrementitious, and that before they grow woody and rotten. 9. Liquors and gums, &c. are to be taken from mature stalks, which are the best in their kind, as the rest. 2. The chronology or time. Thus, 1. Herbs are to be gathered in the time of their flourishing, and beginning to go to seed; which is for the most part in July, if they are to be kept, and that at noon in a clear day, being some considerable time or certain days before; freed from showers and not too dewy, or scorched by too much heat of the sun, which is chiefly in the spring or beginning of summer. But those which grow green all the year in gardens may be gathered at any time; and those which have neither stalk, flower, nor seed, as maidenhair, spleenwort, &c. are to be gathered in the vigour of their leaves, i. e. when they are most green and greatest; yet some, because while they flower or bear seed they are woody and dry, are to be gathered before that time; as succory, beet, &c. 2. Flowers, in the vigour of their maturity, when opened (except the rose) at noon in fair weather, after the sun hath taken off the dew, and before they wither or fall off, which for the most part is in spring. 3. Fruits, when they are ripe, and before they wither. 4. Seeds, out of fruits thorough ripe, when they begin to be dry, and before they fall off; and out of plants when dry and no longer green, as in the summer, i. e. June or July. 5. The juice of plants is to be pressed out whilst they are green, and their leaves yet tender, and especially out of the well-grown and greater. 6. The barks of fruits are to be taken when the fruits are full ripe, and those of roots when the herbs have lost their leaves, but those of trees when they are in their vigour. 7. Woods, when the trees are full grown. 8. Liquors, and gums, &c. are taken by opening the stalk in the vigour thereof, and gum when congealed and mature. 9. Roots, when the fruit is fallen off, and the leaves also begin, which for the most part is in autumn, and are to be dug up in fair weather; which is necessary always

to be observed: as also (according to some) the decreasing of the moon, the day of decreasing, and the morning, that time being balsamical: as also the fortitude of the planet familiar to the thing to be gathered, and the sign of the zodiac. 3. The dropology, or manner of gathering them; as some affirm, some plants having diverse faculties, according to the diverse manner of gathering them, as upwards or downwards; so hellebore, the leaves drawing the humours upwards or downwards accordingly: so the root of elder also, and the buds, which being gathered upwards cause vomiting, and purge if downwards; also some observe the scite of the regent planets, as whether they are oriental or occidental, &c. 4. The paracaeology, or manner of preparing them for asservation. Thus, 1. Flowers, are kept for the most part separated from the stalks and leaves. 2. Herbs or leaves, if they are greater, and have more thick stalks, they are kept apart from them; but, if more slender, they are kept together, and sometimes with the flowers. 3. Fruits, as apples, &c. are to be placed with their stalks downwards, and last longer if laid on a heap of barley. 4. Roots, some are kept whole, as those of birthwort, gentian, hermodactyls, satyrion, &c. others are dissected, as those of briony, elecampane, flower-de-luce, &c. also some have the woody matter taken away, as those of fennel, stone-parsley, &c. 5. The phylacology, or way and place of keeping them; which in general ought to be pure, convenient, high, dry, open, of a north or south situation, where they may not be burnt by the sun, or moistened by the walls, &c. more particularly; as, 1. Flowers, are to be dried in the shade, and then they (especially those of good odour) are to be kept in teile caskets. 2. Herbs, are to be dried in the shade, except those that have thicker stalks, and moister leaves, and so subject to putrefaction, which must therefore be dried by the more intense heat of the sun, or some other way; and, when they are well dried, they are to be kept in linen bags, or, which is better, in wooden caskets, that they may be defended from dust. 3. Seeds, are to be kept in a dry place, and in a wooden or glazed vessel, being wrapped up in papers, that they may last the longer, and without impurity. 4. Fruits in boxes, panniers, or scuttles. 5. Gums and dry resins in a dry place, and in wooden vessels, but the more liquid in pitchers. 6. Barks, in wooden coffers, and a dry place. 7. Roots, in a dry air, and the smaller and more thin (whose virtues may be easily dissipated by the heat of fire or the sun) are to be dried in the shade and wind, and as those of parsley, fennel, &c. but the more gross by the sun or wind, as those of briony, gentian, mandrake, and rhubarb. 6. The monology, or duration of them. Where note, the time of keeping them must not exceed that of their duration, which is diverse, according to the greater or less solidity of the substance,

substance, by which they are more or less subject to dissipation. In particular; 1. Vegetables: as, 1. Flowers may be kept so long as they retain their colour, smell, and taste, which for the most part is half a year; therefore they are to be changed every year. Note also, they are best when freshest. 2. Herbs may be kept longer, yet it is better to change them yearly. 3. Seeds, by how much they are more hot, sharp, and aroniatical, by so much also are they more durable, therefore may be kept two or three years; but those that are smaller and colder must be changed every year, and must be kept carefully, lest they grow mouldy. 4. Fruits must be changed every year; but the exotic, that have a harder bark or shell, &c. may be kept two or three years. 5. Gums and rosins are more durable. 6. Barks last a year or more. 7. Roots, if they are little slender, and thin, are changed every year; as those of assarabecca, sperage, &c. but the greater, and having a gross substance, last two or three years; as those of birthwort, briony, gentian, rhubarb, hellebore, &c.

Thus far we have considered the faculties of medicinals; now follow those of aliments, which are such vegetables, &c. as nourish and increase the bodily substance, by restoring that which is perpendite, the body being in a perpetual decay, and therefore wanting refection by meat and drink: and this, if it do not greatly affect the body by any other quality, is properly and simply called aliment, and is in some measure like unto the substance of the body into which it is to be converted; but if it change the body by an exuberant quality, it is not simply aliment, but medicamentous: such are those things, which with sweetnes have adjoined an acid, acerb, bitter, or sharp, quality; and from hence ariseth the difference of aliments; which, 1. In respect of substance, are hard and soft; heavy, viscid, or light; firm or infirm; easily or hardly concocted or corrupted. 2. In respect of quality, they are hot, cold, moist, or dry; sweet or bitter; sour, salt, sharp, acid, acerb, or austere; of good or bad juice; simple or medicamentous; wholesome or unwholesome; best or worst; of which some are, 1. Euchymic, or of good juice, sweet in taste, agreeable to the palate, and not of any unpleasant smell; as also fat things, and some which are insipid, as bread of the best wheat, &c. 3. Cacochymic, or of evil juice, which, besides sweetnes, have some other quality mixed therewith, as sharpnes, bitterness, saltnes, acerbity, and too much acidity; also all fetid things, of an unpleasant smell, and corrupted; as the oleraceous, (especially the wild,) except lettuce and fuccory, also cucumbers, corrupt corn, things growing in cenoze and dirty places, as also thick, austere, and acid; beer made of bad grain, &c. and some of these engender, 1. A cold, pituitous, and crude, juice, as the hasty fruits and cold herbs. 2. But others, a hot and biliary, as all things that have acrimony, so gar-

lic,

lic, onions, leeks, wake-robin, cresses, mustard, &c. 3. And some a melancholic, as pulses, especially lentils, and cabbage. 3. Of gross nourishment, as those things which have a strong and hard substance, as bread baked under ashes, and whatsoever is made of meal without leaven; chestnuts, acorns, frogstools, thick, sweet, and black, wine and ale; also whatsoever is viscid and glutinous, and are to be shunned by all that live at ease, and use no exercise before meat; but those are the best for diet that are in a mean between incrassating and attenuating. 4. Of thin juice, as things that are not tough or viscid, and have not a strong substance, but thin and friable, especially if joined with acrimony; as garlic, onions, leeks, hyssop, organy, savoury, bread of wheat well fermented and twice baked, bitter almonds, peaches, and thin white wines; these also open the passages, clean away what is viscous, incide and extenuate what is gross; but are to be shunned by those who are of a choleric temperature; the long use of them causing bilious and serous excrements, yet are agreeable to those whose body and veins are full of a crude, pituitous, and melancholic, juice. Here note, an attenuating diet differeth from a slender one, the last prefixing a mode in the quantity, and the other being so called by reason of the tenuity of the alimentary juice. 5. Eupeptic or of easy concoction, as things which have not a solid firm substance, but are either rare or easily resoluble, concocted, or corrupted, as most fruits and things oleraceous; but these, as they are quickly and easily concocted, so also are they easily altered and corrupted: for, if taken into a stomach whose heat is sharp, biting, and febriculous, or into which some bilious humour doth flow, they are not turned into aliment, but some evil humour; but those things that are not easily concocted are also neither altered nor corrupted. 6. Dipeptic, or of hard concoction, as all things of a solid substance and thick juice; as unleavened bread, cabbage, dates, chestnuts, unripe services, acorns, and acid wines. These, if taken into a hot stomach, are sooner concocted than if into a mean; and, in a weak and cold one, they are either concocted not at all, or very slowly.

An experiment of all these may be made by decoction in water. For the liquor, if sweet, sheweth the thing to be of good juice; if thick, of gross juice; if thin, of little; if soon boiled, of much nourishment; if slowly boiled, not easily altered in the stomach, and so the contrary. Also some are, 1. Flatulent, of cold unconcocted humidity; as all fruits early ripe, especially if eaten raw, ciches and lupines; also whatsoever is sweet with austerity, which, by reason they cannot be easily distributed and remain long in the stomach, cause flatulency, as must, new beer, &c. 2. Without wind, of easy elixation, as things well boiled, leavened bread

beard made of good wheat and well baked, and old wine. 3. Easily descending, acid, salt, insipid, or excrementitious ; as things full of humidity; participating of a certain acrimony or saltiness without acerbity ; or are insipid, as mallows, orach, mercury, marigolds, &c. and things full of excrements, as brown bread, and whatsoever is full of bran, and broths. 4. Slowly, as things dry and binding, having little humidity ; as dry meats, fine bread, things having a little astriction ; as pears, services, black wines, or red, but sooner the austere. Thus of the definition of phytology and its parts. 1. Therapeutic, or curatory. 2. Threptic, or alimentary ; in both which vegetables are considered ; 1. According to their substance, as of thick or thin substance or consistence, loose or close, glutinous or crumbling, heavy or light. 2. According to their accidents ; and 1. as medicamentary, 1. according to their more immediate accidents. 1. The qualities ; as the first, heat, coldness, moisture, and dryness, with their degree, sensible, manifest, vehement, or most violent. The second, mollifying, hardening, rarefying, condensing, opening, binding, drawing, repelling, cleansing, purging, attenuating, clamping, obstructing, easing pain, stupefying, reddening, putrefying, and burning. The third, suppurating, incarncing, conglutinating, cicatrizing, generating callus, provoking urine, breaking the stone, provoking the terms, expectorating, and generating milk and sperm, causing sweat, sneezing, beauty, killing worms, and phlegmatizing. The fourth, occult, resisting poison, specific, and purging. 2. The way of finding out these qualities : 1. The manifest, 1. By reason, as by the smell ; colour ; as white, black, green, yellow, &c. Tastes ; as bitter, sharp, acid, nitrous, salt, sweet, acerb, austere, oleous, aquinsipid or waterish, earthy, woodish, and corn-like. Touch ; as thick, thin, close, hollow, hard, soft, heavy, light, clammy, dry, rough, smooth ; mutability, age, places, and operations of the four first qualities. 2. By experience, considering *quid in quo, quomodo*. 2. The occult, 1. By signature. 1. External, in colour, form, property. 2. Internal ; as appropriated, 1. To the planets, as to the Sun, Moon, Saturn, Jupiter, Mars, Venus, Mercury. 2. To the signs, as to Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquaries, and Pisces. 2. By experience, according to the more remote accidents, as the place of gathering them, the time and manner, the way of preparing them for keeping, and place thereof ; their duration, discrimination, place in receipts, with their compositions and way of making them ; their doses, as ingredients and compounded ; their use, and season and manner of using them, &c. II. As alimentary, and so as of good or bad juice, of thick or thin juice, of easy or hard concoction, windy or without wind, easily or slowly descending, &c.

Now follow the differences of Vegetables, and, in general, 1. External. 1. Of Trees, which are, 1. Rhodoflory, or rose-flowered, as the rose, holy-rose, cistus ledon, &c. 2. Pomiferous, or apple-bearing; as the apple-tree, quince-tree, citron-tree, orange-tree, pomegranate-tree, pear-tree, fig-tree, sycamore-tree, mulberry-tree, strawberry-tree, medlar-tree, service-tree, peach-tree, apricot-tree, plum-tree, myrobolans-tree, scbesten-tree, jujube-tree, cornel-tree, nettle-tree, cherry-tree, pock-wood-tree, and eben-tree. 3. Nuciferous, or nut-bearing; as the almond-tree, walnut-tree, filbert-tree, nut-tree, chesnut-tree, phistic-tree, oily-acorn-tree, storax-tree, and exotic-nut-tree. 4. Dactiliferous, as the palm tree, bearing dates. 5. Glandiferous, or mast-bearing; as the beech-tree, oak-tree, cork-oak-tree, Arabian bindweed and oak-tree, mistletoe, gall-tree, and uvaquer-cina. 6. Bacciferous, or berry-bearing; as the saunders-tree, mastic-tree, frankincense-tree, turpentine-tree, balsam-tree, shumach-tree, scarlet-oak-tree, ash-tree, holly-tree, lime-tree, wayfaring-tree, osirys, cotton-tree, maple-tree, plane-tree, ague-tree, great-spurge-tree, barberry-tree, gooseberry tree, elder-tree, laurel, bay-tree, mczereon-tree, mountain widow-wail, rockrose, myrtle-tree, butcher's broom, cloudberry-tree, box-tree, olive-tree, chaste-tree, privet, mock-privet, buckthorn, boxthorn, bramble, caper-tree, savin, cedar-tree, cypress-tree, juniper-tree, yew-tree, dragon-tree, sperage. 7. Aromatisferous, or spice-bearing, as the nutmeg and mace-tree, pudding-pipe-tree, cinnamon-tree, Indian leaf, clove-tree, pepper-tree, cubeb-tree, cloveberry-tree, cardamom-tree, and aloe-tree. 8. Coniferous, or cone-bearing, like pine-apples; as the coniferous cedar, pine-tree, larch-tree, pitch-tree, and fir-tree. 9. Juliferous, or wool-bearing, as the willow-tree, alder-tree, elm-tree, and poplar-tree. 10. Siliquate, or coddled; as the shrub-trefoil, bean-trefoil, Egyptian thorn, rosewood-tree, broom, furze, bastard senna, senna, spindle-tree, and rosebay. 11. Scopary, as the tamarisk-tree, heath, &c. 12. Succiferous, or juice yielding; as the ammoniac-tree, metopion, acacia, manna-tree or ash, gamandra-tree, or Indian great spurge-tree. 13. Gummiferous, or gum-bearing; as the gum-arabic-tree or Egyptian thorn, sorcocol-tree, ivy-tree, caucomum-tree, lacca-tree, dragon-tree, camphor-tree, juniper-tree, cherry-tree, plum-tree, goat's thorn yielding tragacanth, elm-tree, &c. 14. Resiniferous, or rosin-yielding; as the turpentine-tree, larch-tree, mastic-tree, frankincense-tree, myrrh-tree, storax-tree, liquid-amber-tree or ocosoti, bdellium-tree, benjamin-tree, tacamahaca-tree, gum-elemi-tree, colophony-tree, or fir-tree, and pitch-tree.

2. Of Herbs, which differ in respect of, I. Roots; and so they are, 1. Bulbous, or round-rooted; as the bulbous flower-de-luce, wallflower, saffron, meadow-saffron, onions, leeks, squills, garlic, moly, dog-stones, satyron, &c. 2. Not bulbous,

as most other plants. II. The Leaves; and so they are, 1. Longicautifolious, or long-stalk-leaved; as grass, rushes, nard, galingal, horsetail, reed, paper-reed, stinking-gladden, flower-de-luce, aromatical reed, ginger, zedoary, costus, &c. 2. Crasifolious, or thick-leaved; as houseleek, Venus's navelwort, aloes, rose-root, orpine, purflain, samphire, and glaffwort. 3. Hirtifolious, or rough-leaved; as borage, gromel, hound's tongue, and mullein. 4. Nervifolious, or nerve-leaved; as gentian, plantain, fleawort, bistort, pondweed, water-lilies, wake-robin, hellebore, &c. 5. Rotundifolious, or round-leaved; as birthwort, colt's foot, butterbur, bur, and asarum. 6. Mollifolious, or soft-leaved; as marshmallows, mercury, rhubarb, &c. 7. Trifolious, as pentaphils, &c. 8. Capillary, or hair-like; as hart's tongue, moonfern, spleenwort, moonwort, maidenhair, sundew, fern, polypody, &c. 9. Spinose, or prickly; as thistles, teasels, sea-holly, gum-thistle, goat's thorn, &c. III. The Flowers; and so they are, 1. Verticillate and galeate, or turned and helmet-like; as mints, calamint, organy, penny-royal, hyssop, thyme, Arabian sticadove, lavender, spike, ground-pine, oak of Jerusalem, sage, nettles, betony, eyebright, figwort, self-heal, hedge-hyssop, dittany, &c. 2. Stellate, or star-like; as madder, lady's bedstraw, crosswort, and rue. 3. Calcariflorous, or spur-flowered; as columbine, larkspur, toad-flax, &c. 4. Umbelliferous, or bossed; as cummin, fennel, dill, pellitory of Spain, fennel-giant, scorching fennel, turbith, sow-fennel, bee's-nest, chervil, parsley, angelica, masterwort, lasarwort, alheal, carraway, coriander, aniseed, burnet, cicely, hemlock, and dropwort. 5. Corimboide, ring or hook like; as elecampane, pellitory of Spain, mugwort, sneefewort, and wormwood. 6. Capitate, or headed; as scabious, knapweed, blue-bottle, viper's grafts, marigold, devil's bit, thistles, &c. IV. The Fruits; and so they are; 1. Pomiferous, or apple-bearing; as mandrakes, cucumbers, melons, pom-pions, citruls, gourds, wild-cucumbers, &c. 2. Capsuliferous, or coffer-bearing; as garden-cresses, shepherd's pouch, scurvy-grafts, horse-radish, &c. 3. Vasculiferous, or vessel-bearing; as centaury the less, mouse-ear, flax, St. John's wort, pimpernel, moneywort, rupture-wort, poppy, &c. Siliquate, or codded; as the leguminose, and oleraceous, honeysuckle, bird's foot, milkwort, cock's head, goat's rue, liquorice, fumitory, celandine, columbine, and nigella. V. The Place; and so they are, garden, wild, field, mountain, meadow, or aquatic; as moss, duck's meat, tree-lungwort, sea-nettle, wrack, arsefsmart, pimpernel, &c. VI. The manner of growing; and so they are, convolvulous, or climbing; as the pomiferous and leguminous, scammony, sea-bindweed, sarsaparilla, china, briony, mechoacan, hops, vine, lily of the vale, ivy, Indian cresses, birthwort, sow-bread, parnassus-grass, saxifrage, &c. VII. Succiferous, or juice-yielding; as the lactiferous, viz. spurge, chamefyece,

chamelycye, &c. Galbaniferous and sagapeniferous; fennel-giant, apopanax-plant, or Hercules's alheal, black poppy yielding opium, aloes, scammony; wild cucumber yielding elaterium, euphorbium or gum-thistle, liquorice, sugar-reed. VIII. Gumiferous, or gum-bearing; as lasarwort bearing asafœtida.

II. Internal in respect of their use and virtues, or as alimentary and medicinal. Of their use, or as dietical; and so they are, 1. Frumentary, serving as bread-corn; wheat, rye, spelt-corn, barley, oats, rice, Turkey-corn, millet, panic, burnt-corn, and phalaris. 2. Leguminous, serving as pulse; as beans, pease, lentils, ciches, cichling vetches, bitter vetches, lupines, kidney-beans, winged wild pease, and fenugreek. 6. Oleraceous, serving as pot-herbs, fallads, &c. and are, 1. Roots, as onions, garlic, leeks, radish, wild radish, turnips, navew, parsnips, carrots, and red beet. 2. Leaves, as of lettuce, succory, cabbages, spinage, orach, beets, asparagus, cresses, mustard-feed, blites, hops, and stone-parsley. 3. Fruits, as artichokes, gourds, cucumbers, melons, strawberries, capers; and those of trees, as apples, quinces, oranges, lemons, pears, medlars, figs, peaches, apricots, plums, cherries, mulberries, grapes, olives, almonds, chesnuts, walnuts, filberts, and fungi. 4. Condimentary, serving as sauce; as pepper, ginger, cloves, cinnamon, cardainums, nutmeg, mace, saffron, elder, capers, cresses, onionis, garlic, &c. Sugar, oil, and vinegar, &c. The qualities of which, see in my *Isagoge Zoologice-mineralogica*, they being there mentioned for sauces. 2. Of their virtues, or as pharmaceutical in respect of their several parts and qualities, first, second, third, and fourth.

I. Roots; are, 1. Temperate, as bear's beach, eringo, garden parsnips, salop, mallows, machoacan, asparagus, cinquefoil, lady's thistle, and tormentil. 2. Hot, and so, in the first degree, as bafil, burdocks, borage, bugloss, avens, aromaticall reed, china, dog's grafts, liquorice, knee-holly, mallows, marshmallows, pilewort, piony, poppy, sparling, parsley, wild parsnips, self-heal, satyrion, skirrets, scorzonera, valerian great and small, and white lilies. In the second, as asphodel male, carline thistle, cypress long and round, butterbur, devil's bit, hog's fennel, lovage, fennel, mercury, reeds, swallow-wort, spignel, sarsaparilla, squills, waterflag, and zedoary. In the third, as angelica, avon, assarabecca, elecampane, birthwort long and round, briony white and black, celandine, doronicum, filapendula, ginger, stinking gladden, galigal greater and less, hellebore white and black, masterwort, orris English and Florentine, restharrow, sowbread, snakeroot, Virginian turbith, turmeric, and white dittany. In the fourth, as garlic, leeks, onions, and pellitory of Spain. 3. Cold, and so in the first degree, as beets white and red, comfrey,

frey great, madder, plantane, rose-root, and forrel. In the second, as alkanet, daisies, endive, hyacinth, hound's tongue, and succory. In the third, as bistort and mandrakes. In the fourth, as henbane. 4. Dry; and so, in the first degree, as aromatic reed, bear's breech, burdock, red beets, endive, eringo, hyacinth, knee-holly, madder, pilewort, and self-heal. In the second, as alkanet, male asphodil, avens, basil, butterbur, cypress long and round, devil's bit, fennel, hound's tongue, lady's thistle, lovage, marshmallows, mercury, reeds, parsley, plantane, smallage, sorrel, swallow-wort, spatling poppy, succory, spiguel, thistles, valerian, waterflag, and zedoary. In the third, as angelica, aron, assarabecca, elecampane, birth-wort long and round, bistort, white and black briony, carline thistle, china, cinquefoil, white dittany, doronicum, filappendula, greater and less galingale, stinking gladden, ginger, white and black hellebore, hog's fennel, masterwort, orris English and Florentine, peony male and female, restharrow, sowbread, celandine, sarsaparilla, and Virginian snake-root. In the fourth, as costus, garlic, onions, leeks, and pellitory of Spain. 5. Moist, such are basil, white beets, borrage, bugloss, dog's grass, daisies, liquorice, mallows, parsnips, spatling poppy, satyrium, scorzonera, skirrets, valerian. 2. As for the second qualities, they are, 1. Mollifying, as mallows, white lilies, and marshmallows. 2. Opening, as assarabecca, bruscas, carline thistle, endive, filappendula, fennel, garlic, gentian, leeks, onions, parsley, raphontic, succory, asparagus, smallage, turmeric. 3. Binding, as alkanet, bistort, bear's breech, cypress, cinquefoil, tormentil, toothwort, and waterflag. 4. Cleansing, as aron, asphodil, birthwort, grass, asparagus, and celandine. 5. Extenuating, as capers, and orris English and Florentine. 6. Anodyne, as eringo, orris, restharrow, and waterflag. 7. Helping burnings, as asphodil, hyacinths, white lilies. 8. Burning, as garlic, onions, and pellitory of Spain. 9. Discuffing, as asphodil, birthwort, briony, and capers. 10. Expelling wind, as costus, galingale, fennel, hog's fennel, parsley, smallage, spikenard Indian and Celtic, waterflag, and zedoary. 3. As for the third qualities, they are, 1. Suppurating, as briony, marshmallows, and white lilies. 2. Glutinating, as birthwort, comfrey, daisies, gentian, and Solomon's seal. 3. Spermatogenetic, as eringo, galingale, satyrium, and waterflag. 4. Emmenonagogic, as assarabecca, aron, asphodil, birthwort, centaury the less, long and round cypress, costus, capers, calamus aromaticus, carrots, white dittany and of Crete, eringo, fennel, garlic, grass, knee-holly, peony, valerian, waterflag, parsley, smallage. 5. Stopping the terms, as bistort, comfrey, tormentil. 6. Hydrotic, as carline thistle, china, and sarsaparilla. 4. As for the fourth qualities, they are, 1. Alexipharmac, as angelica, long birthwort, bistort, bugloss, costus, cypress, carline thistle, doronicum, elecampane, garlic, gentian, swallow-wort, smallage, tormentil, viper's bugloss, and zedoary. 2. Cathartics, as, 1. Purgers

of choler, as affarabecca, fern, rhubarb, rhapsontic. 2. Of melancholy, as white and black hellebore, and polypody. 3. Of phlegm and water, as asphodil male, white and black briony, wild cucumbers, elder, hermodactyls, jalap, mechoacan, squills, sowbread, spurge great and small, and turbith. 3. Appropriate; and so, 1. They heat; 1. the head, as doronicum, fennel, jalap, mechoacan, peony male and female, and Celtic and Indian spikenard. 2. The neck and throat, as devil's bit, and pilewort. 3. Breast and lungs, as birthwort long and round, calamus aromaticus, cinquefoil, elecampane, liquorice, orris English and Florentine, and squills. 4. The heart, as angelica, borage, bugloss, butterbur, basil, carline thistle, doronicum, scorzonera, tormentil, valerian white and red, and zedoary. 5. The stomach, as avens, fennel, galingale greater or less, ginger, radish, spikenard Celtic and Indian, and elecampane. 6. The bowels, as ginger, valerian great and small; and zedoary. 7. The liver, as carline thistle, china, dog's grafts, fennel, gentian, knee-holly, parsley, rhubarb, rhapsontic, celandine, smallage, cinquefoil, asparagus, and turneric. 8. The spleen, as ash, birthwort round, carline thistle, capers, fern male and female, fennel, gentian, parsley, asparagus, and waterflag. 9. The reins and bladder, as basil, burdock, carline thistle, china, cypress long and round, dropwort, knee-holly, marshmallows, parsley, smallage, sperge, spatling poppy, spikenard Celtic and Indian, faxifrage white, and valerian. 10. The womb, as birthwort long and round, galingale greater and less, hog's fennel, and peony male and female. 11. The fundament, as pilewort. 12. The joints, as bear's breech, costus, ginger, hermodactyls, jalap, and mechoacan. 2. They cool, 1. the head, as rose-root; 2. the stomach, as bistort, endive, succory, and sow-thistles; 3. the liver, as endive, madder, and succory.

II. BARKS, are, 1. Hot; and so, in the first degree, as citrons, lemons, oranges, pockwood, and tamarisk. In the second, as capers, cinnamon common and winter, cassia lignea, and frankincense. In the third, as mace. 2. Cold, and so in the first degree, as oak and pomegranates. In the second, as mandrakes. 3. As for the third qualities, they are, 1. Cathartic: as 1. purgers of choler, as barberries; 2. of phlegm and water, as elder, dwarf elder, laurel, and spurge. 2. Appropriate; and so 1. They heat, 1. The head, as winter cinnamon. 2. The heart, as cinnamon, cassia lignea, citrons, lemons, mace, and walnuts. 3. The stomach, as cassia lignea, cinnamon, citrons, lemons, oranges, and sassafras. 4. The lungs, as cassia lignea, cinnamon, and walnuts. 5. The liver, as barberries, bays, and winter cinnamon. 6. The spleen, as ash, bays, and capers. 7. The reins and bladder, as bays and sassafras. 8. The womb, as cassia lignea and cinnamon. 2. They cool the stomach, as pomegranate-peels.

III. Woods, are, 1. Hot, as aloes, box, ebony, guiacum, nephriticum, rhodium, rosemary, sassafras, tamarisk. 2. Cold, as cyprefs, sanders (white, red, and yellow), and willow. As for the third qualities, they are appropriate, 1. To the head, as rosemary. 2. To the heart and stomach, as of aloes. 3. The bowels and bladder, as rhodium. 4. The liver, spleen, reins, and bladder, as nephriticum. 5. The breast, stomach, and bladder, as sassafras. 6. To the spleen, as tamarisk. 7. The heart and spirits, as sanders.

IV. LEAVES, are, 1. Temperate, as bugle, cinquefoil, betony, flixweed, goat's-rue, hart's-tongue, fluellin, maiden-hair, cammoca black and golden, Paul's betony, trefoil, wall-rue, and wood-rose. 2. Hot, and so in the first degree; as agrimony, avens, borrage, bugloss, basil, cleavers, cetrach, chervil, camomile, cowslips, distaff-thistle, eyebright, marshmallows, melilot, lady's thistle, and self-heal. In the second; as alehoof, Alexanders, archangel, betony, bay, broom, bawn, costmary, cuckoo flowers, carduus benedictus, centaury the less, chamepitys, dill, double-tongue, devil's bit, hoarhound, Indian leaf, lady's mantle, maudlin, mugwort, marigold, marjoram, mercury, oak of Jerusalem, pimpernel male and female, parfley, poley-mountain, periwinkle, rosemary, smallage, scurvy-graſs, sage, sanicle, scabious, ſena, ſoldanella, tanfey, tobacco, vervain, and wormwood common and Roman. In the third; as angelica, arſefmart biting, brooklime, briony white and black, bank cresses, calamint, clary, dwarf-elder, dodder of thyme, featherfew, fleabane, germander, glaſs-wort, herb-mastic, lavender, lovage, mints, mother of thyme, nettles, organy, pilewort, pennyroyal, rue, ſouthernwood male and female, celandine, ſneefewort, ſavin, savory, ſummer and winter, ſpike, thyme, and water-cresses. In the fourth; as crow-foot, dittander, garden-cresses, leeks, rosa folis, ſciatica cresses, ſtone-crop, ſpurge. 3. Cold, and so in the first degree; as arach, arſefmart mild, burdock, burnet, colt's foot, hawkweed, mallows, pellitory of the wall, forrel, wood-forrel, ſhepherd's-purſe, violets, yarrow. In the second; as buckſhorn, chickweed, daifies, dandelion, duck's meat, endive, knotgraſs, lettuce, plantane, purſlain, fumitory, ſuccory, ſtrawberry, tanfey wild, willow. In the third; as nightshade and ſengreen. In the fourth; as hemlock, henbane, mandrakes, poppies. 4. Dry, and so in the first degree; as agrimony, arſefinart mild, burdock, cleavers, chervil, camomile, cowslips, colt's foot, double-tongue, eyebright, flixweed, hawkweed, marshmallows, melilot, periwinkle, ſhepherd's purſe, ſelf-heal, and ſena. In the second, as betony, alehoof, Alexanders, archangel, betony, bugle, buckſhorn, broom, birch, bay, burnet, costmary, cuckoo-flowers, carduus benedictus, centaury the less, chicory, dill; distaff-thistle, dandelion, devil's bit, endive, featherfew, fumitory, Indian leaf, lady's mantle, maudlin, mugwort,

wort, majoram, mercury, pimpernel, plantanes, parsley, rosemary, forrel, smallage, silver-weed, strawberry, sage, fanicle, seabious, foldanella, scurvy-grafs, tobacco, vervain, wormwood common and Roman, wood-forrel, and willow. In the third; as angelica, arsesmart hot, brooklime, briony white and black, bank-cresses, calamint, chamepitys, cinquefoil, clary, dwarf-elder, epithymum, fleabane, germander, glaſs-wort, hoarhound, herb mastic, herb of grace, lavender, lovage, mints, mother of thyme, organy, pilewort, pennyroyal, poley-mountain, southernwood male and female, celandine, sneefewort, savin, savory summer and winter, ſilk-taſſey, thyme, and trefoil. In the fourth; as crow-foot, garden cresses, garlic, leeks, onions, rosa folis, ſpurge, and wild rue. 5. Moiſt, and ſo in the first degree; as borrage, bugloſs, baſil, mallows, marigolds, and pellitory of the wall. In the ſecond; as arach, chickweed, daisies, duck's meat, lettuce, purſlain, ſow-thiſtles, violets, and water-lilies. 2. As for the ſecond qualities, they are, 1. Mollifying, as arach, bay, beets, cypref, fleawort, mallows, marshmallows, pellitory of the wall, and violets. 2. Hardening, as duck's meat, houseleek, herbs cold, nightshade, purſlain. 3. Opening, as endive, garlic, mallows, marshmallows, onions, pellitory of the wall, ſuccory, and wormwood. 4. Binding, as amomum, agnus caſtus, cypref, cinquefoil, comfrey, bawm, fleawort, horſetail, ivy, knot-graſs, bay, melilot, myrtles, oak, plantane, purſlain, ſhepherd's purſe, forrel, ſengreen, and willow. 5. Drawing, as birthwort, dittany, garlic, leeks, onions, pimpernel, and all hot leaves. 6. Cleaſing, as arach, beets, cetrach, chamepitys, dodder, hoarhound, liverwort, pimpernel, pellitory of the wall, ſouthernwood, asparagus, willow, and wormwood. 7. Extenuating, as camomile, hyſſop, juniper, mugwort, mother of thyme, pennyroyal, ſtechas, and thyme. 8. Anodyne, as arach, calamint, chamepitys, camomile, dill, henbane, hops, hog's fennel, marjoram, mother of thyme, parsley, rosemary, rue, and wormwod. 9. Diſcuffing, as arach, beets, camomile, chickweed, dill, maidenhair, marshmallows, mints, melilot, marjoram, pellitory of the wall, rue, ſouthernwood male and female, and ſtechas; alſo bawm, docks, cleavers, cinquefoil, mallows, ſcordium, water-cresses. 10. Expelling wind, as camomile, dill, epithymum, funnel, garlic, juniper, marjoram, organy, savory winter and ſummer, ſmallage, and wormwood. 3. As for the third qualities, they are, 1. Suppurating, as mallows, marshmallows, and white lilies. 2. Glutinating, as agrimony, bugle, centaury, chamepitys, cinquefoil, comfrey, germander, horſetail, knotgraſs, mallows, marshmallows, maudlin, pimpernel, rupturewort, ſtrawberries, ſelf-heal, tobacco, tormentil, wood-chervil, and woundwort. 3. Spermatogenic, as clary, rocket, and herbs hot, moiſt, and windſy. 4. Emmenonagogic, as biſhop's weed, betony, broom, baſil, cabbages, centaury, camomile, calamints, dodder, dittany, fennel, garlic, germander, hoarhound, hartwort,

St. John's wort, maiden-hair, marjoram, mugwort, nettles, organy, pimpernel, poly-mountain, parsley, rue, rosemary, southernwood, sage, smallage, savin, scordium, thyme, mother of thyme, wormwood, and water-cresses. 5. Stopping the terms; as comfrey, houseleek, knot-graſs, myrtles, plantain, shepherd's purse, strawberries, and water-lilies. 4. As for the fourth qualities, they are, 1. Alexiphamic, as alifanders, betony, *carduus benedictus*, calamint, carline-thistle, agrimony, fennel, garlic, germander, hoarhound, juniper, maiden-hair, organy, pennyroyal, poly-mountain, plantain, rue, southernwood, smallage, scordium, and wormwood. 2. Cathartic, as, 1. Purgers of choler, as centaury, groundsel, hops, mallows, peaches, ſena, and wormwood. 2. Of melancholy, as dodder, epithymum, fumitory, ox-eye, and ſena. 3. Of phlegm and water, as danewort, briony, white and black elder, hedge-hyſſop, laurel, mercury, mezerion, ſpurge, ſena, and ſneefewort. 3. Appropriate, and fo, 1. They heat, 1. The head; as betony, costmary, *carduus benedictus*, cowſlips, eyebright, featherfew, goat's rue, herb-mastic, lavender, laurel, lovage, maudlin, melilot, mother of thyme, penny-royal, rosemary, celandine, ſcurvy-graſs, ſneefewort, ſena, ſpike, thyme, and vervain. 2. The throat; as archangel white and red, and devil's bit. 3. The breast; as betony, bay, bawm, calamint, camomile, distaff-thistle, fennel, germander, hyſſop, hoarhound, Indian leaf, maiden-hair, melilot, nettle, oak of Jerusalem, organy, periwinkle, rue, ſcabiouſ, and thyme. 4. The heart; as angelica, elecampane, borrage, bugloſs, bay, bawm, basil, *carduus benedictus*, goat's rue, rue, rosemary, southernwood male and female, ſena, and woodrooſ. 5. The ſtomach; as avens, bay, bawm, broom, fennel, Indian leaf, mints, mother of thyme, parsley, sage, ſchenanth, smallage, thyme, and wormwood common and Roman. 6. The liver; as agrimony, alecost, ash, bay, affarabecca, centaury the leſs, chamepitys, fennel, germander, fox-gloves, hops, hoarhound, hyſſop, lady's thistle, maudlin, mother of thyme, pimpernel male and female, parsley, poly-mountain, smallage, celandine, ſamphire, sage, scordium, ſena, ſoldanella, ſpike-nard, toad-flax, and water-cresses. 7. The bowels; as alehoof, Alexanders, and camomile. 8. The ſpleen; as agrimony, ash-tree, bay, centaury the leſs, cetrach, chamepitys, epithymum, fox-gloves, germander, hops, hoarhound, hart's tongue, maiden-hair, mother of thyme, parsley, poly-mountain, smallage, ſamphire, sage, ſcordium, ſena, toad-flax, tamarisk, water-cresses, and wormwood. 9. The reins and bladder; as agrimony, betony, brooklime, bay, broom, chervil, costmary, camomile, clary, germander, hops, maudlin, marshmallows, melilot, mother of thyme, nettles, organy, pimpernel male and female, penny-royal, rupturewort, rocket, ſamphire, ſchenanth, ſaxifrage, ſcordium, ſpikenard, toad-flax, vervain,

and water-cresses. 10. The womb; as angelica, archangel, calamint, costmary, dittany of Crete, devil's bit, featherfew, fleabane, maudlin, mugwort, mayweed, melilot, mints, nettles, organy, pennyroyal, periwinkles, sage, sawin, scordium, tansey, thyme, and vervain. 11. The joints; as agrimony, artemisiant hot, camomile, costmary, cowslips, garden cresses, St. John's wort, melilot, rosemary, rue, sciatica-cresses, sage, stechas, and water-cresses. 2. They cool, 1. The head; as fumitory, houseleek, lettuce, plantain, strawberry, teasels, violets, water-lily, willow, and wood-forrel. 2. The throat; as bramble, orpine, privet, and strawberries. 3. The breast; as bramble, colt's foot, moneywort, orpine, plantain, poppy, mulberry, forrel, strawberry, violet, and wood-forrel. 4. The heart; as burnet, viper's bugloss, lettuce, forrel, strawberry, violet, water-lily, and wood-forrel. 5. The stomach, as dandelion, endive, hawkweed, lettuce, orpine, purflain, forrel, succory, strawberry, sow-thistles, and violet. 6. The liver; as dandelion, endive, fumitory, lettuce, liver-wort, nightshade, purflain, forrel, strawberry, succory, water-lily, and wood-forrel. 7. The bowels; as buckthorn, burnet, fumitory, mallows, orpine, and plantane. 8. The spleen; as endive, fumitory, lettuce, and succory. 9. The reins and bladder; as houseleek, knot-graft, lettuce, mallows, moneywort, plantain, purflain, water-lily, and yarrow. 10. The womb; as arach, burdocks, endive, lilies, myrtles, moneywort, purflain, fengreen, succory, sow-thistles, water-lily, and wild tansey. 11. The joints; as henbane, houseleek, lettuce, nightshade, vine, and willow leaves.

V. FLOWERS, are, 1. Hot, and so in the first degree; as betony, borage, bugloss, camomile, melilot, ox-eye, and stechas. In the second; as amomus, bawm, clove-gilliflowers, hops, jessamine, lavender, rocket, saffron, spikenard, schenanth, and rosemary. In the third; as agnus castus, epithymum, honey-suckles, wall-flowers, or winter gilliflowers. 2. Cold, and so, in the first degree; as mallows, red, white, and damask, roses, and violets. In the second; as anemony, endive, succory, and water-lilies white and yellow. In the third; as balaustines. In the fourth; as henbane and poppies. 3. Moist, and so in the first degree; as borage, bugloss, endive, mallows, and succory. In the second; as violets and water-lilies. 4. Dry, and so in the first degree; as camomile, melilot, ox-eye, saffron, and roses. In the second; as anemony, clove-gilliflowers, hops, lavender, peony, rocket, rosemary, and spikenard. In the third; as balaustines, chamepitys, epithymum, germander, and woodbine. 2. As for the second qualities, they are, 1. Mollifying, as mallow, saffron, and white lilies. 2. Binding, as agnus castus, balaustines,

laustines, bawn, clove-gilliflowers, melilot, endive, saffron, succory, and red roses. 3. Cleansing, as beans, damask roses, and elders. 4. Extenuating, as camomile, flower-de-luce, melilot, and stechas. 5. Anodyne, as camomile, centaury, dill, melilot, and rosemary. 6. Helping, burnings, as mallows, marshmallows, and white lilies. 7. Discussing, as camomile, dill, mallows, marshmallows, melilot, and stechas, &c. 8. Expelling wind, as camomile, dill, schenanth, and spikenard. As for the third qualities, they are, 1. Suppurating, as saffron, and white lilies. 2. Glutinating, as centaury and balaustines. 3. Emmenionagogic, as betony, camomile, centaury, bawn, rosemary, peony, sage, schenanth, and wall-flowers. 4. Stopping the terms, as balaustines and water-lilies. 4. As for the fourth qualities, they are, 1. Alexipharmac, as betony and centaury. 2. Cathartie, as, 1. Purgers of choler, as damask roses, peaches, and violets. 2. Of phlegm, as broom and elder. 3. Appropriate, and so, 1. They heat, 1. The head, as betony, camomile, cowslips, lavender, melilot, peony, rosemary, sage, self-heal, and stechas. 2. The breast, as betony, bawn, scabious, and schenanth. 3. The heart, as bawn, borage, bugloss, rosemary, saffron, and spikenard. 4. The liver, as camomile, centaury, betony, elder, schenanth, and spikenard. 5. The spleen, as betony and wall-flowers. 6. The reins and bladder, as betony, marshmallows, melilot, schenanth, and spikenard. 7. The womb, as betony, flower-de-luce, sage, and schenanth. 8. The joints, as camomile, cowslips, melilot, and rosemary. 2. They cool, 1. The head, as poppies, roses, violets, and water-lilies. 2. The breast and heart, as roses, violets, and water-lilies. 3. The stomach, as roses and violets. 4. The liver and spleen, as endive and succory. 3. They moisten the heart, as borage, bugloss, and violets. 4. They dry it, as bawn, betony, and rosemary-flowers.

VI. FRUITS, are, 1. Temperate, as currants, dates, figs, pine-nuts, raisins, and sebestens. 2. Hot, and so in the first degree; as sweet almonds, cypress-nuts, hasel-nuts, jujubes, and green-walnuts. In the second, as ben-nuts, capers, fistic-nuts, hasel-nuts dry, nutmegs, and dry walnuts. In the third, as anacardium, bitter-almonds, carpopalsamum, cloves, cubeb, and juniper-berries. In the fourth, as pepper, guinea pepper, and the rest. 3. Cold, and so in the first degree, as citrons, pears, prunes, and quinces. In the second, as apples, cucumbers, galls, gourds, lemons, melons, oranges, pompions, pomegranates, peaches, and prunes. In the third, as mandrakes. In the fourth, as stramonium. 4. Moist, and so in the first degree; as citrons, lemons, oranges inner rind. In the second; as gourds, melons, peaches, and prunes. 5. Dry, and so in the first degree; as juniper-

juniper-berries. In the second, as bay-berries, ben-nuts, capers, fistic nuts, nutmegs, pears, pine-nuts, and quinces. In the third, as cloves, and galls. In the fourth, as all peppers. 2. As for the second qualities, they are, 1. Binding, as barberries, chesnuts, cherries, cornels, services, acorns and their cups, galls, medlars, myrtle-berries, nutmegs, olives, pears, peaches, and pomegranates. 2. Ex-tenuating, as sweet and bitter almonds, bay-berries, and juniper-berries. 3. Anodyne, as bay-berries, figs, ivy-berries, juniper-berries, currants, all peppers, raisins, and walnuts. 4. Discussives, as capers and all peppers. 5. Expelling wind, as bay-berries, juniper-berries, nutmegs, and all peppers. 3. As for the third qualities, they are, 1. Glutinating, as acorns, acorn-cups, currants, dates, and raisins. 2. Spermatogenetic, as sweet-almonds, figs, pine-nuts, and raisins of the sun. 3. Emnienonagogic, as capers, and ivy-berries. 4. Stopping the terms, as barberries. 5. Diuretic, as winter cherries. 4. As for the fourth qualities, they are, 1. Alexiphamic, as bay-berries, citrons, juniper-berries, pepper, pomecitrons, and walnuts. 2. Cathartic, as, 1. Purgers of choler, as cassia fistula, citrine myrobolans, prunes, raisins, and tamarinds. 2. Of melancholy, as Indian myrobolans. 3. Of phlegm, as colocynthis, wild cucumbers, and myrobolans. 3. Appropriate, and so, 1. They heat, 1. The head, as anacardium, cubebs, and nutmegs. 2. The breast, as almonds bitter, cubebs, dates, figs, hasel-nuts, jujubes, raisins of the sun, and pine-nuts. 3. The heart, as juniper-berries, nutmegs, and walnuts. 4. The stomach, as almonds sweet, ben, cloves, juniper-berries, nutmegs, olives, and pine-nuts. 5. The spleen, as capers. 6. The reins and bladder, as almonds bitter, cubebs, juniper-berries, raisins of the sun, and pine-nuts. 7. The womb, as juniper-berries, bay-berries, nutmegs, and walnuts. 2. They cool, 1. The breast, as oranges, lemons, prunes, and sebestens. 2. The heart, as citrons, lemons, oranges, pears, pomegranates, and quinces. 3. The stomach, as apples, citrons, cucumbers, cherries, cornels, currants, services, gooseberries, gourds, lemons, medlars, musk-melons, oranges, pears, pompions, and quinces. 4. The liver, as barberries, and coolers of the stomach. 5. The reins and womb, as strawberries, and the same.

VII. SEEDS, are, 1. Hot, and so in the first degree; as coriander, fenugreek, gromel, linseed, lupines, and rice. In the second, as basil, dill, nettles, orobus, rocket, and smallage. In the third, as amomus, aniseed, bishop's weed, caraway, cardamoms, carrots, cumin, fennel, hartwort, navew, nigella, and staves acre. In the fourth, as mustard-seed and water-cresses. 2. Cold, and so in the first degree; as barley. In the second, as citruls, cucumbers, endive, gourds, lettuce, melons,

night-

nightshade, pompions, purplain, forrel, and succory. In the third, as hemlock, henbane, and poppies white and black. 3. Moist, and so in the first degree; as mallows. 4. Dry, and so in the first degree; as barley, beans, fennel, fenugreek, and wheat. In the second, as lentils, nightshade, orobus, poppies, and rice. In the third, as aniseed, caraway, coriander, cummin, bishop's weed, dill, gromel, nigella, parsley, and smallage. 2. As for the second qualities, they are, 1. Mollifying; as fenugreek, linseed, mallows, and nigella. 2. Hardening; as purplain-seed. 3. Binding; as barberries, purplain, rose-seeds, and shepherd's purse. 4. Cleansing; as barley, beans, lupines, nettles, and orobus. 5. Anodyne, as amomus, carrots, cardamom, cummin, dill, fenugreek, gromel, linseed, orobus, panic, and parsley. 6. Discussing; as carrots, dill, fenugreek, nigella, and linseed; also barley, coriander, darnel, lupines, mallows, and marshmallows, helping swellings. 7. Expelling wind; as aniseed, caraway, carrots, cummin, dill, fennel, hartwort, nigella, parsley, smallage, and wormwood. 3. As for the third qualities, they are, 1. Suppurating; as darnel, fenugreek, French barley, and linseed. 2. Glutinating; as darnel, lupines, and orobus. 3. Spermatogenetic; as ash-tree-keys, beans, cicers, and rocket. 4. Emmenonagogic; as amomus, anise, bishop's weed, carrots, cicers, fennel, hartwort, parsley, lovage, sperage, and smallage. 5. Stopping the terms; as burdock, cummin, and rose-seeds. 6. Lithontriptic; as gromel, mallows, and marshmallows. 4. As for the fourth qualities, they are, 1. Alexipharmic; as anise, bishop's weed, cardamoms, citrons, fennel, lemons, oranges, and smallage. 2. Appropriate; and so, 1. They heat, 1. The head; as fennel, marjoram, and piony. 2. The breast; as nettles. 3. The heart; as basil rue, and mustard-feed. 4. The stomach; as amomus, anise, bishop's weed, cardamoms, cubebs, cummin, grains of paradise, and smallage. 5. The liver; as amomus, anise, bishop's weed, caraway, carrots, cummin, fennel, smallage, and sperage. 6. The spleen; as anise, caraway, and water-cresses. 7. The reins and bladder; as cicers, gromel, nettles, rocket, and saxifrage. 8. The womb; as piony and rue. 2. The joints; as mustard-feed, rue, and water-cresses. 2. They cool, 1. The head; as lettuce, white poppies, and purplain. 2. The breast; as white poppies and violets. 3. The heart; as citrons, lemons, oranges, and forrel-feed; also the four greater and smaller cold seeds, viz. of citruls, cucumbers, gourds, and melons; endive, lettuce, purplain, and succory, cool the liver, spleen, reins, bladder, womb, and joints; and the white and black poppy-feed do the same.

VIII. **GUMS**, are, 1. Temperate; as elemi, lacca, and tragacanth. 2. Hot, and so in the first degree; as bdellium and ivy-gum. In the second, as frankincense, galbanum, mastic, myrrh, olibanum, pitch, rosin, and styrax. In the third, as ammoniacum. In the fourth, as euphorbium. 3. Cold, as gum arabic. 2. As for the second qualities, they are, 1. Mollifying, as ammoniacum, bdellium, colophonia, galbanum, opopanax, turpentine, rosin, pitch, and styrax. 2. Binding; as gum arabic, sandarac or Jupiter-gum, and tragacanth. 3. As for the third qualities, they are, 1. Emmenonagogic, as styrax. 2. Lithontriptic, as cherry-gum. 4. As for the fourth qualities, they are cathartic, as opopanax, purging phlegm.

IX. **JUICES**, are, 1. Temperate; as liquorice, and white starch. 2. Hot, and so in the first degree; as sugar. In the second, as labdanum. In the third, as asafoetida, and benjamin. 3. Cold, and so in the second degree; as acacia, and sanguis draconis. In the third, as hypocystis. In the fourth, as opium. As for the fourth qualities, they are cathartic; as aloes, manna, and scammony, purging choler.

X. **WATERS**, are, 1. Hot; and so, 1. Concocting phlegm: 1. In the head; as betony, calamint, camomile, eyebright, fennel, marjoram, primroses, rosemary, and sage. 2. In the breast and lungs, as bawm, betony, carduus benedictus, flower-de-luce, hoarhound, hyssop, maiden-hair, scabious, and self-heal. 3. In the heart, as bawm and rosemary. 4. In the stomach, as chervil, fennel, marigolds, mints, mother-of-thyme, thyme, and wormwood. 5. In the liver, as agrimony, centaury, costmary, marjoram, maudlin, organy, fennel, and wormwood. 6. In the spleen, as calamint, water-cresses, and wormwood. 7. In the reins and bladder, as burnet, elecampane, nettles, pellitory of the wall, rocket, and saxifrage. 8. In the womb, as calamint, lovage, mother-of-thyme, mugwort, pennyroyal, and favin. 2. Concocting melancholy; 1. In the head, as fumitory and hops. 2. In the breast, as bawm and carduus benedictus. 3. In the heart, as bawm, borage, bugloss, and rosemary. 4. In the liver, as chichory, endive and hops. 5. In the spleen, as dodder, hart's-tongue, tamarisk, and thyme. 2. Cold; and so, 1. Cooling the blood; as endive, fumitory, lettuce, purflain, forrel, succory, violets, and water-lilies. 2. Cooling choler; 1. In the head; as black cherries, lettuce, nightshade, plantain, poppies, and water-lilies. 2. In the breast and lungs, as colt's-foot, poppies, and violets. 3. In the heart, as roses, forrel, quinces, violets, walnuts green, and water-lilies. 4. In the stomach, as houfleek, lettuce, nightshade, purflain, quinces, roses, sengreen, and violets. 5. In the liver, as endive,

endive, nightshade, purflain, succory, and water-lilies. 6. In the reins and bladder, as black cherries, endive, houfleek, plantain, strawberries, succory, water-lilies, and winter-cherries. 7. In the womb; as endive, lettuce, purflain, roses, succory, and water-lilies. Thus of the vegetable simples; now follow their compositions, which are,

I. WINES, which are, 1. Hot; heating, 1. The head; as betony, fennel, eye-bright, rosemary, sage, and stechas. 2. The heart; as borage and bugloss. 3. The breast; as elecampane, hyssop, and raisins. 4. The stomach; as black cherries, forrel, and wormwood. 5. The liver; as germander. 6. The spleen; as tamarisk. 7. The reins and bladder; as sage and winter-cherries. 2. Binding, as myrtles, roses, and quinces. 3. Provoking sweat, as pockwood. 4. Purging; 1. Phlegm, as squills. 2. Choler yellow, as scammony. 3. Melancholy, as black hellebore. 4. Water, as danewort and chamelæ.

II. DECOCTIONS; which are, 1. Raficient, as barley, cicers, and ptisan. 2. Temperate, as the common, and of flowers and fruits. 3. Heating the breast; as the pectoral. 4. Aromatic, as the two for wounded men. 5. Sudorific, as guaiacum. 6. Purgers, of, 1. The blood; as maiden-hair and fumitory. 2. Choler yellow, as of fruits. 3. Of phlegm, as stechas and thyme. 4. Melancholy; as of epithymum, and senna of Gereon. 5. Mixed humours, as fumitory and myrobolans.

III. SYRUPS; which are, 1. Altering, and so concocting, 1. Choler; 1. In the head; as poppies and water-lilies. 2. In the breast; as jujubes, pomegranates, and violets. 3. In the stomach; as agresta, acerose, myrtles, oxysaccharate, quinces, and roses. 4. In the heart, as acerose, citrons, lemons, and oranges. 5. In the liver; as endive and succory. 2. Phlegm; 1. In the head; as betony, stechas, and anardine honey. 2. In the breast; as hyssop, hoarhound, calamint, liquorice, maidenhair, and scabious. 3. In the heart; as the byzantine. 4. In the stomach; as mints, oxymel of squills, and common honey of roses, and wormwood. 5. In the liver; as eupatorium, and two and five roots. 6. In the matrix, as mugwort. 3. Melancholy; 1. In the heart; as borage, bugloss, and apples. 2. In the liver and spleen, as hops, epithymum, spleenwort, and fumitory. 2. Purging; 1. Choler, as of chicory with rhubarb, peach-flowers, rhubarb, roses, violets, and mercurial honey. 2. Phlegm, as of briony-roots, hermodactils, oxymel helleborated, and julianizans. 3. Mixed humours, as diaforeos.

IV. LOHOCHS; which are, 1. Astringent, as of diascordium, fleawort, and poppies. 2. Absterfive, as of colt's-foot, colewort, pine-kernels, hoarhound, bastard saffron, forrel, squills, raisins, fanum, and expertum.

V. PRESERVES; which are, 1. Hot, heating and corroborating, 1. The heart; as apples, citron-peels, myrobolans, chebs, nutmegs, Indian nuts, and orange-peels. 2. The stomach; as acorus, aromatical reed, galingale, ginger, citron-peels, Indian nuts, pears, quinces, and walnuts. 3. The reins; as eringo-roots. 2. Cold, cooling, and strengthening, 1. The stomach; as myrobolans, emblics, cherries, medlars, peaches; prunes, and services. 2. The liver; as chicory roots.

VI. CONSERVES; which are, 1. Hot, heating, 1. The head; as of acorus, betony, eyebright, lavender-flowers, marjoram, peony, roses, rosemary, fage, and stachas-flowers. 2. The breast; as bawm, hyssop, and maiden-hair. 3. The heart; as borrage, bugloss, clove-gilliflowers, orange, and rosemary-flowers. 4. The stomach; as elecampane, mints, and wormwood. 5. The liver; as elder-flowers, fumitory, and wormwood. 6. The spleen; as fumitory and spleenwort. 7. The womb; as bawm, marjoram, and rosemary-flowers. 2. Cold, cooling, 1. The head; as roses, violets, and water-lily flowers. 2. The breast; as violets. 3. The heart; as roses, forrel, and violets. 4. The stomach; as roses and violets. 5. The liver; as chicory, roses, and violet-flowers. 6. The spleen; as roses and violets. 7. The reins; as roses. 8. The womb; as roses and violets. 9. The joints; as roses and violets.

VII. POWDERS; which are, 1. Hot; heating, 1. The head; as diacorum, diapeonias, and pleres arconticon. 2. The breast; as diapenidion, diatragacanth hot, diacalamint, diahyssopum, diaprasium, and diathamaron. 3. The heart; as aromaticum rosatum and caryophyllum, dianthos and diaxylo-aloes. 4. The stomach; as the rofat. aromatic. diagalanga, dianisum, diaxylo-aloes, diacyminum, diacinnamomum, diaziniber, diaspoticum, and diatrimon-piperion. 5. The liver; as dialacca, diacurcuma, diacinnamomum, and diacalaminth. 6. The spleen; as diacapparis. 7. The womb; as diacalaminth. 2. Cold; cooling, 1. The head; as diapapaver and diatragacanth. 2. The heart; as diarrhodon abbatis and diatrimon fantalon. 3. The stomach; as diarrhodon abbatis and diatrimon fantalon. 4. The liver; as diarrhodon abbatis and diatrimon fantalon. 5. The spleen; as diatrimon fantalon and diarrhodon abbatis. 6. The womb, as diatrimon fantalon and diarrhodon abbatis. 7. The joints, as diarrhodon abbatis and diatrimon fantalon.

VIII. ELECTUARIES; which are, 1. Hot, heating, 1. The head, as *confectio anacardina* and *theriaca diafessaron*. 2. The breast, as *diaireos*. 3. The heart, as *confectio alkermes*. 4. The stomach, as *excitro* of bay-berries, and *rosata novella*. 5. The liver, as *diacinnamomum*. 6. The spleen, as *diacapparis*. 2. Cold; cooling, 1. The head, as the *resumptivum*. 2. As for the second qualities, they are astringent, as *diacydonium*, *miciera*, and *triphera minor*. 3. As for the third qualities, they are, 1. Lithontripic, as *lithontribon*. 2. Venereal, as *diasatyrion*, *diacaryon*, and *triphera far*. 4. As for the fourth qualities, they are cathartic; purging, 1. Choler, as *diaprnum*, *sol de psyllio*, and of roses. 2. Phlegm, as *benedicta laxativa*, *diaphenicon*, *diaturbith*, *hiera picra* with agaric, *pa-  
chy*, *hermetis*, and *diacolocynth*. 3. Melancholy, as *diasena*, *confectio hamech*, *diapolypodium*, and *hieralogadium*. 4. Mixed humours, as *diacarthamum*, *dia-  
turbith* with rhubarb, and *hiera ruffi*.

IX. PILLS; which are, 1. Anodyne, as *laudanum*, *ex cynogloso*, and of *styrax*. 2. Cathartic; purging, 1. Choler; 1. In the head, as the golden pills, and *arabic*. 2. In the liver, as of *eupatorium*, and rhubarb. 2. Phlegm; 1. In the head, as the cochie of *hiera*, with agaric, *coloquintida*, *albandal*, and of six and eight things. 2. In the breast, as of agaric, and *hiera* with agaric. 3. In the stomach, as the *aloephagine*, *mastic*, and of *turbith*, common and pestilential. 4. In the joints, as the *arthritic*, *fetid*, of *hermodactils*, *opopanax*, *sagapen*, and *farcocol*. 3. Melancholy, in the liver and spleen, as of *fumitory*, and *indie*. 4. Water, as of *euphorbium* and *mezereon*. 5. Mixed humours; 1. In the head, as the cochie *lucis* greater and smaller, and fine *quibus*. 2. In the stomach, as the golden *affaireth*, *aloes*, *hiera simple*, *imperial*, *turbith*, *mastic*, and *pestilential*. 3. In the liver, as of three things, and *halicacabum*. 4. In the whole body, as the *aggregative*.

X. TROCHES; which are, 1. Hot, as of *xylaloes*, *saffron*, and *crocomagma da-  
moe*. 2. Cold, as of *camphire* and *sanders*. 2. As for the second qualities, they are, 1. Astringent, as of *barberries* and *diaspermaton*. 2. Emollient; as of *capers*. 3. Opening, as of *bitter almonds*, *benjamin*, *aniseed*, *lacca*, *eupatorium*, *myrrh*, *roses*, *rhubarb*, *winter-cherries*, and *wormwood*. 4. Absterfive, as *cypheos*. 5. Anodyne, as *camphire*, *diarrhodon*, *diaspermaton*. 4. As for the fourth qualities, they are cathartic; purging, 1. Choler, as of *rhubarb*. 2. Phlegm, as of agaric, *albandal*, and *hamech*. 3. Mixed humours, as of *violets*.

XI. OILS; which are, 1. Hot; heating, 1. The stomach; as of mastic, mints, nard, and wormwood. 2. The liver; as of bitter almonds, mastic, nard, peaches, and wormwood. 3. The spleen; as of capers, behen, lilies, and spike. 4. The womb; as the cherine, dill, flower-de-luce, saffron, and nard. 5. The joints; as of nard, nutmegs, and Indian nuts. 6. The nerves; as of costus, euphorbium, mastic, pepper, sweet marjoram, and elecampane. 2. Cold, cooling, 1. The head; as of mandrakes and poppies. 2. The stomach; as the lentisk, myrtle, myrtle, omphacine, quinces, and roses. 3. The breast; as of violets, and water-lilies. 4. The liver; as the stomachical. 5. The reins; as water-lilies. 6. The nerves; as lentisk. 7. The womb; as of gourds, lentisk, myrtles, quinces, and water-lilies. 3. Dry, as of nard, nuts, and ricinus. 4. moist, as of sweet almonds, fresh olives, cucumbers, gourds, melons, oily-pulse, and violets. 2. As for the second qualities, they are, 1. Mollifying, as daffodil, linseed, styrax, camomile, and lilies. 2. Resolving, as dill, camomile, and euphorbium. 3. Loosening, as of sweet-almonds, jessamine, and olives. 4. Binding, as of mastic, mints, myrtles, myrtle, lentisk, and oenanthe. 5. Drawing, as of bays, dill, St. John's wort, and rue. 6. Cleansing, as of myrrh, elder, radish, and ricinus. 7. Digesting, as of bitter almonds, nuts, olives, and rue. 8. Anodyne, as of camomile, dill, bays, elder, St. John's wort, poplars, lilies, wall-flowers, almonds sweet, linseed, olives, omphacine, fleawort, poppies, and roses. 3. As for the third qualities, they are, 1. Suppurating, as of lilies. 2. Glutinating, as of liquid amber, balsam, myrrh, and tobacco. 3. Incarning, as salad-oil. 4. Cicatrizing, as of oil of such simples. 5. Venereal, as of fistic-nuts. 6. Lithontriptic, as of cherries and citron-kernels. 7. Hypnotic, as of henbane, nightshade, lilies of the water, mandrakes, and poppies. 4. As for the fourth qualities, they are cathartic, as the enicine and of thymelæa.

XII. OINTMENTS; which are, 1. Hot, as of bdellium, dialthea, arregon, martiatum, agrippa, and for the stomach. 2. Cold, as the white and red camphorate, Galen's refrigerant, poplars, rosate, and violets. 2. As for the second qualities, they are, 1. Mollifying, as of briony, dialthea, resumptivum, tetrapharmacon, and artanite. 2. Binding, as comitissæ, defensivum, Galen's refrigerant, citrinum, populeon, and the pectoral. 3. Drawing, as the fuscum, arregon, agrippæ, martiatum. 4. Cleansing, as citron and egyptiacum. 5. Anodyne, as the anodyne pectoral dialthea, arregon, martiatum, resumptivum, populeon, and Galen's refrigerant. 6. Hypnotic,

6. Hypnotic, as populeon. 7. Resolving, as of bays, agrippæ, arregon, and marmatatum. 3. As for the third qualities, they are, 1. Suppurating, as basilicon. 2. Incarning, as aureum, and comitissæ. 3. Glutinating, as aureum and the citron, and potable. 4. Cicatrizing, as album and rubrum. 4. As for the fourth qualities, they are cathartic, as agrippæ, and of sow-bread.

XIII. CERATES ; which are, 1. Hot, as of euphorbium, and that for the stomach. 2. Cold, as fantaline.

XIV. PLASTERS ; which are, 1. Hot, as that for the stomach. 2. Cold, as that of hemlock. 2. As for the second qualities, they are, 1. Mollifying as diachylon, gratia Dei, melilot, and oxycroceum. 2. Binding, as of the crust of bread, and diaphenicon. 3. Drawing, as of betony, diachylon magnum, with gums of melilot and oxycroceum. 4. Cleansing, as ifis gal de janua divinum. 5. Anodyne, as of bay-berries, melilot, oxycroceum. 6. Resolving, as great diachylon, with gums of cummin, bay-berries, melilot, and oxycroceum. 3. As for the third qualities, they are, 1. Suppurating, as diachylon simple, the great with gums, and of mucilages. 2. Incarning, as of betony, diapalma, de janua, and nigrum. 3. Glutinating, as diapalma, and nigrum. 4. Cicatrizing, as diapalma.

XV. EXTRACTS ; which are, 1. Glutinating, as of comfrey. 2. Spermatogenous, as of satyrion. 3. Cathartic ; purging, 1. Choler, as of rhubarb. 2. Phlegm as of agaric and aloes. 3. Melancholy, as of black hellebore.

XVI. SALTS ; which are, 1. Cathartic ; purging, 1. By coughing, as of St. John's wort, and polypody. 2. By urine, as of camomile, bean-stalks, broom, gentian, juniper, hedge-hyssop, rest-harrow, and wormwood. 3. By the womb, as of bawm, celandine, and mugwort. 4. By sweat, as of pockwood.

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THUS far of vegetables, considered as medicinal and alimentary, with their principal differences, in respect of the whole or parts ; as trees or herbs, by their roots, barks, woods, leaves, flowers, fruits, buds, seeds or grains, tears, liquors, gums, rosins, juices, things bred thereof, waters, &c. with their temperature and qualities ; first, second, and third ; and as appropriate and medicinal in general. As

also of their compounds, viz. spirits, waters, tinctures, wines, vinegars, decoctions, syrups, robs, lohochs, preserves, conserves, sugars, powders, electuaries, pills, troches, oils, ointments, cerecloths, plasters, and chemicals: and of roots, barks, leaves, flowers, fruits, buds, grains or pulses, juices, and oils. As alimentary in general, we have fully spoken; there now remains the more particular enquiry thereininto, from the plants and herbs themselves, which are the basis of the whole.

The differences of vegetables, as to their parts and qualities, the synonymous names of plants and herbs, and the several diseases they are found to cure, according to the experience of all botanical authors, now follow in alphabetical order, and form a complete arrangement of family and physical herbs, which grow spontaneously in the different parts of this island, for the natural cure or nourishment of its diseased inhabitants.

END OF THE TREATISE.

CULPEPER's

## CULPEPER'S ENGLISH PHYSICIAN,

CONTAINING THE

## HERBAL;

With the systematic LINNÆAN NAMES now first added.

AMARA-DULCIS. *SOLANUM*.

**C**ONSIDERING that divers shires in this nation give divers names to one and the same herb, and that the common name which it bears in one county is not known in another; I shall take the pains to set down all the names that I know of each herb. Pardon me for setting that name first which is most common to myself; besides amara-dulcis, some call it morral, others bitter-sweet, some wood nightshade, and others felon-wort.

**DESCRIPTION.** It grows up with woody stalks even to a man's height, and sometimes higher; the leaves fall off at the approach of winter, and spring out of the same stalk again at spring-time; the branch is encompassed about with a whitish bark, and hath a pith in the middle of it; the main branch spreadeth itself out into many small ones, with claspers laying hold on what is next to them, as vines do; it bears many leaves; they grow in no order at all, or at least in no vulgar order; the leaves are longish, though somewhat broad and pointed at the ends; many of them have two little leaves growing at the end of their footstalk, some of them have but one, and some none; the leaves are of a pale green colour; the flowers are of a purple colour, or of a perfect blue, like to violets, and they stand many of them together in knots; the berries are green at the first, but, when they are ripe, they are very red; if you taste them, you shall find them just as the crabs which we in Sussex call bitter-sweet, viz. sweet at first, and bitter afterwards.

No. 5.

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PLACE.

PLACE. They grow commonly almost throughout England, especially in moist and shady places.

TIME. The leaves shoot out about the latter end of March; if the temperature of the air be ordinary, it flowereth in July, and the seeds are ripe soon after, usually in the next month.

GOVERNMENT AND VIRTUES. It is under the planet Mercury, and a notable herb of his also, if it be rightly gathered under his influence. It is excellent good to remove witchcraft, both in men and beasts; as also all sudden diseases whatsoever. Being tied about the neck, it is one of the most admirable remedies for the vertigo, or dizziness in the head; and that is the reason (as Tragus saith) the people in Germany commonly hang it about their cattle's neck when they fear any such evil hath betided them. Country people commonly use to take the berries of it, and, having bruised them, they apply them to felons, and thereby soon rid their fingers of such troublesome guests.

Now we have shown you the external use of the herb, we shall speak a word or two of the internal; and so conclude. Take notice that it is a mercurial herb, and therefore of very subtle parts, as indeed all mercurial plants are; therefore take a pound of the wood and leaves together, bruise the wood, (which you may easily do, for it is not so hard as oak;) then put it in a pot, and add to it three pints of white wine; put on the pot-lid, and shut it close; then let it infuse hot over a gentle fire twelve hours; then strain it out; so you have a most excellent drink to open obstructions of the liver and spleen, to help difficulty of breathing, bruises, and falls, and congealed blood in any part of the body; also for the yellow jaundice, the dropfy, and black jaundice, and to cleanse women newly brought to bed. You may drink a quarter of a pint of the infusion every morning; it purgeth the body very gently, and not churlishly as some hold. And, when you find good by this, remember me.

#### A L H E A L. PASTINACA.

IT is called alheal, Hercules's alheal, and Hercules's woundwort; because it is supposed that Hercules learned the virtues of this herb from Chiron, when he learned physic of him: some call it panay, and others opopanax.

DESCRIPTION. Its root is long, thick, and exceedingly full of juice, of a hot and biting taste; the leaves are great and large, and winged almost like ash-tree leaves, but that they are somewhat hairy, each leaf consisting of five or six pair of such wings set one against the other, upon footstalks, broad below, but narrow towards the end; one of the leaves is a little deeper at the bottom than the other; of a fair

yellowish

yellowish fresh green colour; they are of a bitterish taste, being chewed in the mouth. From among these riseth up a stalk, green in colour, round in form, great and strong in magnitude, five or six feet in altitude, with many joints and some leaves thereat; towards the top come forth umbels of small yellow flowers, and after they are passed away you may find whitish yellow short flat seeds, bitter also in taste.

PLACE. Having given you the description of the herb from the bottom to the top, give me leave to tell you that there are other herbs called by this name; but, because they are strangers in England, I gave only the description of this, which is easy to be had in the gardens of divers persons.

TIME. Although Gerrard saith that they flower from the beginning of May to the end of December, experience teacheth those that keep it in their gardens, that it does not flower till the latter end of the summer, and sheds its seeds presently after.

GOVERNMENT AND VIRTUES. It is under the dominion of Mars; hot, biting, and choleric; and remedies what evils Mars afflicts the body of man with by sympathy, as viper's flesh attracts poison and the loadstone iron. It kills worms; helps the gout, cramp, and convulsions; provokes urine, and helps all joint-achs; it helps all cold griefs of the head, the vertigo, falling fickness, and lethargy; the wind-cholic, obstructions of the liver and spleen, stone in the kidneys and bladder. It provokes the terms, expels the dead birth; it is excellent good for the grief of the finews, itch, sores, and tooth-ach; also the biting of mad dogs and venomous beasts; and purgeth choler very gently.

### A L K A N E T. LITHOSPERMUM.

BESIDES the common name, it is called orchanet and Spanish bugloss; and by apothecaries anchusa.

DESCRIPTION. Of the many sorts of this herb there is but one grows commonly in this nation, of which one take this description. It hath a great and thick root of a reddish colour; long, narrow, and hairy, leaves, green like the leaves of buglos, which lie very thick upon the ground, and the stalks rise up compassed about thick with leaves, which are less and narrower than the former; they are tender and slender; the flowers are hollow, small, and of a reddish purple colour; the seed is greyish.

PLACE. It grows in Kent near Rochester, and in many places in the west country, both in Devonshire and Cornwall.

TIME.

TIME. They flower in July and the beginning of August, and the seed is ripe soon after; but the root is in its prime, as carrots and parsnips are, before the herb runs up to stalk.

GOVERNMENT AND VIRTUES. It is an herb under the dominion of Venus, and indeed one of her darlings, though something hard to come by. It helps old ulcers, hot inflammations, burnings by common fire and St. Anthony's fire, by antipathy to Mars; for these uses, your best way is to make it into an ointment. Also if you make a vinegar of it, as you make vinegar of roses, it helps the morphew and leprosy; if you apply the herb to the privities, it draws forth the dead child; it helps the yellow jaundice, spleen, and gravel in the kidneys. Dioscorides saith it helps such as are bitten by venomous beasts, whether it be taken inwardly or applied to the wound; nay, he saith further, if any one who hath newly eaten it do but spit in the mouth of a serpent, the serpent instantly dies. It stays the flux of the belly, kills worms, helps the fits of the mother; its decoction, made in wine and drunk, strengthens the back, and easeth the pains thereof; it helps bruises and falls, and is a good remedy to drive out the small pox and measles. An ointment made of it is excellent for green wounds, pricks, or thrusts.

#### ADDER's TONGUE, OR SERPENT's TONGUE. OPHIOGLOSSUM.

DESCRIPTION. THIS small herb hath but one leaf, which grows with the stalk a finger's length above the ground, being fat, and of a fresh green colour, broad like the water-plantain, but less, without any middle rib in it; from the bottom of which leaf, on the inside, riseth up ordinarily one, sometimes two or three, small slender stalks, the upper half whereof is somewhat bigger, and dented with small round dents of a yellowish green colour, like the tongue of an adder or serpent. Only this is as useful as they are formidable. The root continues all the year.

PLACE. It groweth in moist meadows and such-like places.

TIME. And is to be found in April and May, for it quickly perisheth with a little heat.

GOVERNMENT AND VIRTUES. It is an herb under the dominion of the Moon in Cancer; and therefore, if the weakness of the retentive faculty be caused by an evil influence of Saturn in any part of the body governed by the Moon, or under the dominion of Cancer, this herb cures it by sympathy; it cures those diseases after specified in any part of the body under the influence of Saturn by antipathy.

It is temperate in respect of heat, but dry in the second degree. The juice of the leaves drunk with the distilled water of horsetail is a singular remedy for all manner of wounds in the breast, bowels, or other parts of the body; and is given with good success

success unto those who are troubled with casting, vomiting, or bleeding, at the mouth or nose, or voiding blood downwards. The said juice, given in the distilled water of oaken buds, is very good for women who have their usual courses, or the whites, flowing too abundantly. It helps sore eyes. The leaves infused or boiled in oil omphacine, or unripe olives, set in the sun for certain days, or the green leaves sufficiently boiled in the said oil, make an excellent green balsam, not only for green and fresh wounds, but also for old and inveterate ulcers; especially if a little fine clear turpentine be dissolved therein. It also stayeth and reppresteth all inflammations that arise upon pains by hurts or wounds, either taken inwardly or outwardly applied. For ruptures or bursten bellies, take as much of the powder of the dried leaves as will lie on a fixpence, or less, according to the age of the party, in two ounces of horsetail or oak-bud water, sweetened with syrup of quinces. Use it every morning for the space of fifteen days. But, before you enter upon the use of this or any other medicine, the gut, if it fall into the scrotum, must be reduced by a surgeon, and a truss must be worn to keep it up, and the party must avoid all violent motion, and lie as much as may be in bed, or on a couch. Fabricius Hildanus says, that some have been cured of great ruptures by lying in bed, when they could be cured no other way.

#### A G R I M O N Y. AGRIMONIA.

**DESCRIPTION.** THIS hath divers long leaves, some greater, some smaller, set upon a stalk, all of them dented about the edges, green above, and greyish underneath, and a little hairy withal; among which riseth up usually but one strong, round, hairy, brown stalk, two or three feet high, with smaller leaves set here and there upon it, at the top whereof grow many yellow flowers one above another in long spikes, after which come rough heads of seeds hanging downwards, which will cleave to and stick upon garments, or any thing that shall rub against them. The root is black, long, and somewhat woody, abiding many years, and shooting afresh every spring; which root, though small, hath a pleasant smell.

**PLACE.** It grows upon banks, near the sides of hedges or rails.

**TIME.** It flowereth in July and August, the seed being ripe shortly after.

**GOVERNMENT AND VIRTUES.** It is moderately hot and moist, according to the nature of Jupiter. It is under Jupiter and the sign Cancer, and strengthens those parts under that planet or sign, and removes diseases in them, by sympathy, and those under Saturn, Mars, and Mercury, by antipathy, if they happen in any part of the body governed by Jupiter, or under the signs Cancer, Sagittarius, or Pisces;

and therefore must needs be good for the gout, either used outwardly in an oil or ointment, or inwardly in an electuary or syrup, or concreted juice; for which see the latter end of the book. It has moreover been recommended in dropies and the jaundice. Externally, it has indeed its use; I have seen very bad sore legs cured by bathing and fomenting them with a decoction of this plant.

It is of a cleansing and cutting faculty, without any manifest heat, moderately drying and binding. It openeth and cleanseth the liver, helpeth the jaundice, and is very beneficial to the bowels, healing all inward wounds, bruises, hurts, and other distempers. The decoction of the herb made with wine, and drunk, is good against the biting and stinging of serpents, and helps them that have foul, troubled, or bloody, water, and causes them to make water clear and speedily. It also helpeth the cholic, cleanseth the breast, and relieves the cough. A draught of the decoction, taken warm before the fit, first relieves, and in time removes, the tertian or quartan ague. The leaves and seed, taken in wine, stay the bloody flux; outwardly applied, being stamped with old swine's grease, it helpeth old sores, cancers, and inveterate ulcers; and draweth forth thorns, splinters of wood, nails, or any other such thing, gotten into the flesh. It helpeth to strengthen members that be out of joint; and, being bruised and applied, or the juice dropped in, it helpeth foul imposthumed ears. The distilled water of the herb is good to all the said purposes, either inward or outward, but it is a great deal weaker..

I cannot stand to give you a reason in every herb why it cureth such diseases; but, if you please to peruse my judgment in the herb wormwood, you shall find it there; and it will be well worth your while to consider it in every herb: you shall find them true throughout the book.

#### W A T E R - A G R I M O N Y. EUPATORIUM.

IT is called in some countries water hemp, bastard hemp, and bastard agrimony; also *eupatorium* and *hepatorium*, because it strengthens the liver.

**DESCRIPTION.** The root continues a long time, having many long slender strings; the stalks grow up about two feet high, sometimes higher; they are of a dark purple colour; the branches are many, growing at distances the one from the other, the one from the one side of the stalk, the other from the opposite point; the leaves are winged, and much indented at the edges; the flowers grow at the tops of the branches, of a brown yellow colour, spotted with black spots, having a substance within the midst of them like that of a daisy; if you rub them between your fingers,

they smell like rosin, or cedar when it is burnt; the seeds are long, and easily stick to any woollen thing they touch.

**PLACE.** They delight not in heat, and therefore they are not so frequently found in the southern parts of England as in the north, where they grow frequently; you may look for them in cold grounds, by ponds and ditch-sides, as also by running waters; sometimes you shall find them grow in the midst of the waters.

**TIME.** They all flower in July and August, and the seed is ripe presently after.

**GOVERNMENT AND VIRTUES.** It is a plant of Jupiter, as well as the other ari-mony; only this belongs to the celestial sign Cancer. It healeth and drieth, cutteth and cleanseth, thick and tough humours of the breast; and for this I hold it inferior to but few herbs that grow. It helps the cachexia, or evil disposition of the body; also the dropsy and yellow jaundice. It opens obstructions of the liver, and mollifies the hardness of the spleen; being applied outwardly, it breaks imposthumes; taken inwardly, it is an excellent remedy for the third-day ague; it provokes urine and the terms; it kills worms, and cleanseth the body of sharp humours, which are the cause of itch, scabs, &c. The smoke of the herb, being burnt, drives away flies, wasps, &c. and strengthens the lungs exceedingly. Country people give it to their cattle when they are troubled with the cough, or broken winded.

#### A L E - H O O F , O R G R O U N D - I V Y . G L E C O M A .

SEVERAL countries give it several names, so that there is scarcely an herb growing of that bigness that hath so many: it is called cat's-foot, ground-ivy, gill-go-by-ground and gill-creep-by-ground, tun-hoof, hay-maids, and ale-hoof.

**DESCRIPTION.** This well-known herb lieth, spreadeth, and creepeth upon the ground, shooting forth roots at the corners of the tender-jointed stalks, set all along with two round leaves at every joint, somewhat hairy, crumpled and unevenly dented about the edges with round dents: at the joints likewise with the leaves, toward the ends of the branches, come forth hollow long flowers, of a bluish purple colour, with small white spots upon the lips that hang down. The root is small, with strings.

**PLACE.** It is commonly found under the hedges, and on the sides of ditches, under houses, or in shadowed lanes, and other waste grounds, in almost every part of the land.

**TIME.** They flower somewhat early, and abide so a great while; the leaves continue green until winter, and sometimes abide, except the winter be very sharp and cold.

**GOVERNMENT AND VIRTUES.** It is an herb of Venus, and therefore cures the diseases she causes by sympathy, and those of Mars by antipathy. You may usually find it all the year long, except the weather be extreme frosty. It is quick, sharp, and bitter, in taste, and is thereby found to be hot and dry; a singular herb for all inward wounds, ulcerated lungs or other parts, either by itself, or boiled with other the like herbs; and, being drunk, it in a short time easeth all griping pains, windy and choleric humours in the stomach, spleen, or belly; helps the yellow jaundice by opening the stoppings of the gall and liver, and melancholy by opening the stoppings of the spleen, expelleth venom or poison, and also the plague; it provoketh urine and women's courses. The decoction of it in wine, drunk for some time together, procureth ease unto them that are troubled with the sciatica, or hip-gout, as also the gout in the hands, knees, or feet; and, if you put to the decoction some honey, and a little burnt alum, it is excellent good to gargle any sore mouth or throat, and to wash the sores and ulcers in the privy parts of man or woman; it speedily helpeth green wounds, being bruised and bound thereto. The juice of it, boiled with a little honey and verdigrease, doth wonderfully cleanse fistulas, ulcers, and stayeth the spreading or eating of cancers and ulcers; it helpeth the itch, scabs, wheals, and other breakings-out, in any part of the body. The juice of celandine, field-daisies, and ground-ivy, clarified, and a little fine sugar dissolved therein, and dropped into the eyes, is a sovereign remedy for all the pains, redness, and watering, of them; as also for the pin and web, skins and films growing over the sight. It helpeth beasts as well as men. The juice dropped into the ears doth wonderfully help the noise and singing of them, and helpeth the hearing which is decayed. It is good to tun up with new drink, for it will so clarify it in a night, that it will be fit to be drunk the next morning; or, if any drink be thick with removing, or any other accident, it will do the like in a few hours.

#### ALEXANDER. SMYRNIUM.

IT is also called alisander, horse-parsley, and wild parsley, and the black pot-herb; the seed of it is that which is usually sold in the apothecaries' shops for Macedonian parsley-seed.

**DESCRIPTION.** It is usually sown in all the gardens in Europe; and so well known, that it needs no further description.

**TIME.** They flower in June or July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** It is an herb of Jupiter, and therefore friendly to nature, for it warmeth a cold stomach, and openeth stoppings of the liver, and wonderfully

wonderfully helpeth the spleen; it is good to remove women's courses, to expel the after-birth, to break wind, to provoke urine, and help the strangury; and these things the seeds will do likewise. If either of them be boiled in wine, or be bruised and taken in wine, it is also effectual against the biting of serpents. And now you know what alexander pottage is good for, that you may no longer eat it out of ignorance, but out of knowledge.

### BLACK ALDER TREE. RHAMNUS.

**DESCRIPTION AND NAMES.** THIS groweth up like a small shrub, or bush, and spreads into many branches; the wood is white, and red at the core; the bark blackish with white spots, the inner bark yellow, the leaves somewhat like the common alder; the flowers are white, and come forth at the joints with the leaves; the berries are round, first green, then red, and black when they are ripe. The Latins call it *frangula*, and *alnus nigra baccifera*; in Hampshire it is usually known by the name of dog-wood.

**PLACE.** This tree or shrub may be found plentifully in St. John's wood by Hornsey, and in the woods upon Hampstead-heath, as also a wood called the Old Park, at Barcomb in Sussex, near the brook's side.

**TIME.** It flowereth in May, and the berries are ripe in September.

**GOVERNMENT AND VIRTUES.** It is a tree of Saturn. The inner bark thereof purgeth downwards both choler and phlegm, and the watery humours of such as have the dropsy, and strengtheneth the inward parts again by binding. The green leaves of this tree, applied to tumours, discuss them, and take off inflammations. Being put into travellers' shoes, they ease pain, and remove weariness. A black colour like ink is made with the bark of alder rubbed off with a rusty iron, and infused in water for some days. Some use it to dye. If the bark hereof be boiled with agrimony, wormwood, dodder, hops, and some fennel, with smallage, endive, and succory roots, and a reasonable draught taken every morning for some time together, it is very effectual against the jaundice, dropsy, and the evil disposition of the body: especially if some suitable purging medicine have been taken before to avoid the grosser excrements; it purgeth and strengtheneth the liver and spleen, cleaning them from such evil humours and hardness as they are afflicted with. It is to be understood, that these things are performed by the dried bark; for the fresh green bark, taken inwardly, provoketh strong vomitings, pains in the stomach, and gripings in the belly; yet, if the decoction stand and settle two or three days, until the yellow colour be changed black, it will not work so strongly as before,

but will strengthen the stomach and procure an appetite to meat. The outer bark contrariwise doth bind the body, and is helpful for all lasks and fluxes thereof; but this must also be dried first, whereby it will work the better. The inner bark thereof, boiled in vinegar, is an approved remedy to kill lice, to cure the itch, and take away scabs by drying them up in a short time; it is singularly good to wash the teeth, to take away the pains, to fasten those that are loose, to cleanse them, and keep them sound. The leaves are good fodder for kine, to make them give more milk.

If in the spring-time you use the herbs before-mentioned, and will but take a handful of each of them, and to them add a handful of elder-buds, and, having bruised them all, boil them in a gallon of ordinary beer when it is new, and, having boiled them half an hour, add to this three gallons more, and let them work together, and drink a draught of it every morning, half a pint, or thereabouts,—it is an excellent purge for the spring, to consume the phlegmatic quality the winter hath left behind it, and withal keep your body in health, and consume those evil humours which the heat of summer will readily stir up.

#### C O M M O N A L D E R T R E E. BETULA.

**DESCRIPTION.** It groweth to a reasonable height, and spreads much if it likes the place. It is generally so well known unto the country people, that I conceive it needless to tell them that which is no news.

**PLACE AND TIME.** It delighteth to grow in moist woods and watery places; flowering in April or May, and yielding the feed in September.

**GOVERNMENT AND USE.** It is a tree under the dominion of Venus, and of some watery sign or other, I suppose Pisces; and therefore the decoction or distilled water of the leaves is excellent against burnings and inflammation, either with wounds or without, to bathe the place grieved with, and especially for that inflammation in the breast which the vulgar call an ague. If you cannot get the leaves, (as in winter it is impossible,) make use of the bark in the same manner. The leaves and bark of the alder-tree are cooling, drying, and binding. The fresh leaves laid upon swellings dissolve them, and stay the inflammations; the leaves, put under the bare feet galled with travelling, are a great refreshing to them; the said leaves gathered while the morning dew is on them, and brought into a chamber troubled with fleas, will gather them thereinto, which, being suddenly cast out, will rid the chamber of those troublesome bed-fellows.

## ANGELICA. ARALIA.

ANGELICA signifies the *angelical* or *angel-like* herb. On what occasion this excellent name was first given to it I know not; unless it were for the excellent virtues thereof, or for that God made it known to man by the ministry of an angel. I suppose the former case rather to be true: however, as I am not able to prove the other, so I think no man can give any good reason to the contrary. For this we know, that God hath made his angels ministering spirits, to serve us for the safeguard of our souls, as also of our bodies. But, upon what occasion soever the name was given, it is excellent, and so are its properties.

Angelica is hot and dry at least in the third degree. All the later writers agree upon this, and experience proveth the same, that it is good against poison, pestilent airs, and the pestilence itself. The practitioners of Germany write thus of it:—If any man be suddenly taken either with the pestilence, or with any pestilent ague, let him drink of the powder of the root half a dram, mingled with a dram of treacle, in three or four spoonfuls of the water of angelica, distilled from the roots, and, after his going to bed, covering himself well, let him fast at least three hours; which if he do, he will begin to sweat, and, by the help of God, he will be cured of his disease. For want of treacle, take a whole dram of the root of angelica in powder, with so much of the distilled water as aforesaid, and it will have the same effect.

The root of angelica well steeped in vinegar, and smelt to in time of pestilence, and the same liquor being drunk sometimes fasting, preserveth from infection. But, in my judgment, it is better to take an orange or a lemon, cut off the top, pick out the meat, prick it full of small holes, put into it a piece of sponge or fine linen cloth dipped in the aforesaid vinegar, and smell to it. The water distilled out of the roots of angelica, or the powder of the same, is good against gnawing and pains of the belly occasioned by cold, if the body be not bound. It is good against all inward diseases, as pleurisy, in the beginning before the heat of the inflammation be come into the body; for that it dissolveth and scattereth abroad such humours as use to cause the pleurisy. Moreover it is good for the diseases of the lungs, if they come of a cold cause; and for the strangury, if from a cold cause, or of a stopping. It is good for a woman that is in travail. It expelleth wind that is in the body, and easeth the pain that cometh from the same. The root may be sod in wine or water, as the nature of the sick requireth. The root or the juice put into a hollow tooth, taketh away the ach; the same effect hath the distilled water, being put into the ear. The juice or water of angelica quickens the eye-sight, and breaks the little films

films that cover the eyes, causing darknes of sight. Of the roots of angelica and pitch may be made a good plaster against bitings of mad beasts. The water, the juice, or the powder, of this root, sprinkled upon the diseased place, is a very good remedy against old and deep sores, for they scour and cleanse them, and cover the bones with flesh. The water of the same, in a cold cause, is good to be laid on places diseased with the gout and sciatica; for it easeth the pain, and melteth away the tough humours that are gathered together. The seed is of like virtue with the root. The wild angelica, that groweth here in low woods, and by the water-side, is not of such virtues as the other; howbeit the surgeons feethe the root of it in wine to heal green wounds. These properties I have gathered out of German writers. I have not as yet proved them all myself; but divers of them I have proved, and have found them to be true. I have set down the peel of an orange, or lemon; the meat whereof is also commended by physicians to be a good preservative both against poison and the infection of pestilence.—Late writers affirm, that the roots of angelica are opposite to all poison and infection. If any be infected with the plague, or poisoned, they give him immediately to drink a dram of the powder of this root with wine in the winter, and in summer with distilled water of carduus benedictus; then get him to bed, and cover him until he sweat freely. The same root being taken fasting in the morning, or but held in the mouth, doth keep and preserve the body from the evil of the air. The leaves of angelica pounded with the leaves of rue and honey are very good to be laid to the bitings of mad dogs presently after the hurt, the wine being drunk wherein the roots or leaves of angelica have been boiled.

There is both garden and wild angelica; some also reckon up a water kind: it groweth up with great hollow stalks, four or five feet high, having broad divided leaves, of a pale green colour; at the top come forth large umbels of white flowers, after which succeed flat seeds, somewhat whitish; the root perisheth every year, if it be suffered to feed.

**PLACE AND TIME.** Angelica is Latin and English; it grows commonly in our gardens, and wild also in many places; flowers about July, and the seed is ripe soon after.

**GOVERNMENT AND VIRTUES.** It is an herb of the Sun in Leo; let it be gathered when he is there, the Moon applying to his good aspect; let it be gathered either in his hour, or in the hour of Jupiter; let Sol be angular. Observe the like in gathering the herbs of other planets, and you may happen to do wonders. In all epidemical diseases caused by Saturn, this is as good a preservative as grows; it resists poison by defending and comforting the heart, blood, and spirits; it doth the like

against

against the plague and all epidemical diseases, if the root be taken in powder to the weight of half a dram at a time with some good treacle in carduus water, and the party thereupon laid to sweat in his bed; if treacle be not to be had, take it alone in carduus or angelica water. The stalks or roots, candied and eaten fasting, are good preservatives in time of infection, and at other times to warm and comfort a cold stomach. The root also steeped in vinegar, and a little of that vinegar taken sometimes fasting, and the root smelled unto, is good for the same purpose. A water distilled from the root simply, or steeped in wine, and distilled in glafs, is much more effectual than the water of the leaves; and this water, drunk two or three spoonfuls at a time, easeth all pains and torments coming of cold and wind, so as the body be not bound; and, taken with some of the root in powder at the beginning, helpeth the pleurify, as also all other diseases of the lungs and breast, as coughs, phthysic, and shortheit of breath; and a syrup of the stalks doth the like. It helps pains of the cholic, the strangury, and stoppings of the urine; procureth women's courses, and expelleth the after-birth; openeth the stoppings of the liver and spleen, and briefly easeth and discusseth all windines and inward swellings. The decoction drunk before the fit of an ague, that they may sweat, if possible, before the fit comes on, will in two or three times taking rid it quite away. It helps digestion, and is a remedy for a surfeit. The juice, or the water, being dropped into eyes or ears, helps dimnes of sight and deafnes; the juice, being put into hollow teeth, easeth their pains. The roots in powder, made up into a plaster with a little pitch, and laid on the biting of a mad dog, or any other venomous creature, doth wonderfully help. The juice or water dropped, or tents wet therein, and put into old, filthy, deep, ulcers, or the powder of the root, in want of either, doth cleanse and cause them to heal quickly, by covering the naked bones with flesh. The distilled water, applied to places pained with the gout or sciatica, doth give a great deal of ease.

The wild angelica is not so effectual as the garden, although it may be safely used to all the purposes aforesaid.

#### A M A R A N T H. AMARANTHUS.

BESIDES this common name, by which it is best known by the florists of our days, it is also called flower-gentle, flower-velure, floramior, and velvet-flower.

DESCRIPTION. It being a garden flower, and well known to every one that keeps it, I might forbear the description; yet notwithstanding, because some desire it, I shall give it.—It runneth up with a stalk a cubit high, streaked, and somewhat reddish towards the root, but very smooth, divided towards the top with small branches, among which stand long broad leaves of a reddish-green colour, and slippery. The

No. 5.

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flowers

flowers are not properly flowers, but tufts, very beautiful to behold, but of no smell, of a reddish colour; if you bruise them, they yield juice of the same colour; being gathered, they keep their beauty a long time; the seed is of a shining black colour.

TIME. They continue in flower from August till the frosts nip them.

GOVERNMENT AND VIRTUES. It is under the dominion of Saturn, and is an excellent qualifier of the unruly actions and passions of Venus, though Mars also should join with her. The flowers, dried, and beaten into powder, stop the terms in women, and so do almost all other red things. And by the icon or image of every herb the ancients at first found out their virtues. Modern writers laugh at them for it; but I wonder in my heart how the virtue of herbs came at first to be known, if not by their signatures; the moderns have them from the writings of the ancients, the ancients had no writings to have them from. But to proceed: the flowers stop all fluxes of blood whether in man or woman, bleeding either by the nose or wound. There is also a sort of amaranthus which bears a white flower, which stops the whites in women, and the running of the reins in men, and is a most singular remedy for the venereal disease.

#### A N E M O N E. ANEMONE.

CALLED also *wind-flower*, because they say the flowers never open but when the wind bloweth: Pliny is my author; if it be not so, blame him. The seed also, if it bears any at all, flies away with the wind.

PLACE AND TIME. They are sown usually in the gardens of the curious, and flower in the spring-time. As for the description, I shall pass it, they being well known to all those that sow them.

GOVERNMENT AND VIRTUES. It is under the dominion of Mars, being supposed to be a kind of crow-foot. The leaves provoke the terms mightily, being boiled and the decoction drunk. The body being bathed with the decoction of them cures the leprosy. The leaves being stamped, and the juice snuffed up the nose, purgeth the head greatly: so doth the root, being chewed in the mouth, for it causeth much spitting, and bringeth away many watery and phlegmatic humours, and is therefore excellent for the lethargy. And, when all is done, let physicians say what they please, all the pills in the dispensatory purge not the head like to hot things held in the mouth: being made into an ointment, and the eyelids anointed therewith, it helps inflammations of the eyes, whereby it is palpable that every stronger draweth its weaker light; the same ointment is exceeding good to cleanse malignant and corroding ulcers.

## GARDEN ARRACH. ATRIPLEX.

CALLED also orach, and orage.

DESCRIPTION. It is so commonly known to every housewife, it were but labour lost to describe it.

TIME. It flowereth and seedeth from June to the end of August.

GOVERNMENT AND VIRTUES. It is under the government of the Moon; in quality cold and moist like unto her. It softeneth and looseneth the body of man being eaten, and fortifieth the expulsive faculty in him. The herb, whether it be bruised and applied to the throat, or boiled and in like manner applied, it matters not much, is excellent good for swellings in the throat; the best way I suppose is to boil it, and, having drunk the decoction inwardly, apply the herb outwardly: the decoction of it besides is an excellent remedy for the yellow jaundice.

## ARRACH WILD AND STINKING. CHENOPODIUM.

CALLED also *vulvaria*, from that part of the body upon which its operation is most: also dog's arrach, goat's arrach, and stinking motherwort.

DESCRIPTION. This hath small and almost round leaves, yet a little pointed, and without dent or cut, of a dusky mealy colour, growing on the slender stalks and branches that spread on the ground, with small flowers in clusters set with the leaves, and small seeds succeeding like the rest, perishing yearly, and rising again with its own sowing. It smells like old rotten fish, or something worse.

PLACE. It grows usually upon dunghills.

TIME. They flower in June and July, and the seed is ripe quickly after.

GOVERNMENT AND VIRTUES. Stinking arrach is useful as a remedy to help women pained and almost strangled with the mother, by smelling to it; but inwardly taken there is not a better remedy under the moon for that disease. I would be large in the commendation of this herb, were I but eloquent. It is an herb under the dominion of Venus, and under the sign Scorpio. The works of God are given freely to man; his medicines are common and cheap, and easy to be found: the medicines of the college of physicians are dear, and scarce to find. I commend this for an universal medicine for the womb, and such a medicine as will easily, safely, and speedily, cure any disease thereof, as the fits of the mother, dislocation, or falling out thereof; it cools the womb being over-heated; and let me tell you this, and I will tell you but the truth, heat of the womb is one of the greatest causes of hard labour in child-birth. It makes barren women fruitful, it cleanseth the womb if it be foul,

and strengthens it exceedingly; it provokes the terms if they be stopped, and stops them if they flow immoderately: you can desire no good to your womb but this herb will effect it; therefore, if you love children, if you love health, if you love ease, keep a syrup always by you made of the juice of this herb and sugar, or honey if it be to cleanse the womb; and let such as be rich keep it for their poor neighbours, and bestow it as freely as I bestow my studies upon them, or else let them look to answer for it another day when the Lord shall come to make inquisition of blood.

### A R C H A N G E L. LAMIUM.

TO put a gloss upon their practice, the physicians call an herb, which country people vulgarly know by the name of *dead nettles*, archangel, wherein whether they favour more of superstition or folly I leave to the judicious reader. There is more curiositie than courtesy to my countrymen used by others in the explanation, as well of the names as description of this well-known herb: which, that I may not also be guilty of, take this short description. First, of the red archangel.

**DESCRIPTION.** This hath divers square stalks, somewhat hairy, at the joints whereof grow two sad-green leaves dented about the edges, opposite each other, the lowermost upon long footstalks, but without any towards the tops, which are somewhat round, yet pointed, and a little crumpled and hairy: round about the upper joints, where the leaves grow thick, are sundry gaping flowers of a pale reddish colour; after which come the seeds, three or four in a husk. The root is small and thready, perishing every year; the whole plant hath a strong scent, but not stinking.

White archangel hath divers square stalks, none standing upright, but bending downward, whereon stand two leaves at a joint, larger and more pointed than the other, dented about the edges, and greener also, more like unto nettle-leaves, but not stinging, yet hairy: at the joints, with the leaves, stand larger and more open gaping white flowers, in husks round about the stalks, (but not with such a bush of leaves and flowers, set in the top as is on the other,) wherein stand small roundish black seeds. The root is white, with many strings at it, not growing downward, but lying under the upper crust of the earth; and abideth many years increasing. This has not so strong a scent as the former.

Yellow archangel is like the white in the stalks and leaves, but that the stalks are more straight and upright, and the joints with leaves are farther asunder, having longer leaves than the former, and the flowers a little larger and more gaping, of a fair yellow colour in most, in some paler. The roots are like the white, only they creep not so much on the ground.

PLACE. They grow almost every-where, unlesſ it be in the middle of the street; the yellow most usually in the wet grounds of woods, and sometimes in the dryer, in divers counties.

TIME. They flower from the beginning of the spring all the summer long.

VIRTUES AND USE. The archangels are ſomewhat hot, and dryer than ſting-nettles, and uſed with better ſucces, for the ſtopping and hardneſs of the ſpleen, than they, by taking the decoction of the herb in wine, and afterwards applying the herb hot to the region of the ſpleen as a paſter, or the decoction with ſponges. The flowers of the white archangel are paſerved, or conſerved, to be uſed to ſtay the whites, and flowers of the red to ſtay the reds, in women.

#### A R S E S M A R T. POLYGONUM.

THE hot arſefmart is called alſo water-pepper, and culrage: the mild arſefmart is called dead arſefmart, procicaria, or peachwort, because the leaves are ſo like the leaves of a peach-tree; it is alſo called plumbago.

DESCRIPTION. The mild herb hath broad leaves ſet at the great red joints of the ſtalks, with ſemicircular blackiſh marks on them uſually, yet ſometimes without. The flowers grow in long ſpikes uſually, either bluiſh or whitish, with ſuch-like ſeed following. The root is long, with many ſtrings thereat, periſhing early; this hath no ſharp taſte, as the other fort hath, which is quick and biting, but rather ſour like forrel, or elſe a little drying or without taſte.

PLACE. It grows in watery places, ditches, and the like; which for the moſt part are dry in ſummer.

TIME. It flowereth in June, and the ſeed is ripe in Auguft.

GOVERNMENT AND VIRTUES. As the virtues of theſe are various, ſo is alſo their government: for that which is hot and biting is under the dominion of Mars; but Saturn chal lengeth the other, as appears by the lead-coloured ſpot he hath placed upon the leaf. The water arſefmart is of great uſe in the ſtone of the kidneys or bladder, a draught of it being taken every morning for two or three months together. A country gentleman uſed a load of this herb in the year to make the water, wherewith he cured many of the ſtone. The root or ſeed, put into an acning hollow tooth, takes off the pain. There is ſcarcely any thing more effeſtual to drive away flies; for, whatever wounds or ulcers cattle have, if they are anointed with the juice of arſefmart, the flies will not come near, though it be the heat of ſummer. It is of a cooling and drying quality, and very effeſtual for putrified ulcers in man or beaſt, to kill worms, and cleanse the putrified places. The juice thereof dropped in, or otherwife applied, conuermeth all cold

swellings, and dissolveth the congealed blood of bruises, falls, &c. The leaves bruised, and laid to the joint that hath a felon thereon, taketh it away. The juice destroyeth worms in the ears, being dropped into them: if the hot arse-smart be strewed in a chamber, it will soon kill all the fleas, and drive away the flies, in the hottest time of summer: a good handful of the hot biting arse-smart, put under a horse's saddle, will make him travel the better, although he were half tired before. The mild arse-smart is good against hot imposthumes and inflammations at the beginning, and to heal green wounds.

All authors chop the virtues of both sorts of arse-smart together, as men chop herbs for the pot, when both of them are of quite contrary qualities. The hot arse-smart groweth not so high, or tall, as the mild doth, but hath many leaves of the colour of peach-leaves, very seldom or never spotted; in other particulars it is like the former, but may easily be known from it, if you will be but pleased to break a leaf of it across your tongue, for the hot will make your tongue to smart, but the cold will not. If you see them both together, you may easily distinguish them, because the mild hath far broader leaves: and our college of physicians, out of their learned care for the public good, *Anglice*, their own gain, mistake the one for the other in their New Masterpiece, whereby they discover, 1. Their ignorance; 2. Their carelessness; and he that hath but half an eye may see their pride without a pair of spectacles. I have done what I could to distinguish them in their virtues; and, when you find not the contrary named, use the mild.

#### ASARABACCA. ASARUM.

**DESCRIPTION.** ASARABACCA hath many heads rising from the roots, from whence come many smooth leaves, thicker also, and of a dark green shining colour on the upper-side, and of a pale-yellow green underneath, little or nothing dented about the edges, from among which rise small, round, hollow, brown-green, husks, upon short stalks about an inch long, divided at the brims into five divisions, very like the cups or heads of henbane-seed, but that they are smaller; and these are all the flowers it carrieth, which are somewhat sweet, being smelled unto, and wherein when they are ripe is contained small cornered rough seeds, very like the kernels or stones of grapes or raisins. The roots are small and whitish, spreading divers ways in the ground, and increasing into divers heads, but not running or creeping under the ground as some other creeping herbs do. They are somewhat sweet in smell, resembling nardus, but more when they are dry than green; and of a sharp, but not unpleasant, taste.

PLACE. It groweth frequently in gardens.

TIME. They keep their leaves green all the winter, but shoot forth new in the spring, and with them come forth those heads or flowers which give ripe seed about midsummer, or somewhat after.

GOVERNMENT AND VIRTUES. It is a plant under the dominion of Mars, and therefore inimical to nature. This herb, being drunk, not only provoketh vomiting, but worketh downward, and by urine also, purging both choler and phlegm: if you add to it some spikenard, with the whey of goat's milk, or honeyed water, it is made more strong; but it purgeth phlegm more manifestly than choler, and therefore doth much help pains in the hips and other parts. Being boiled in whey, it wonderfully helpeth the obstructions of the liver and spleen, and is therefore profitable for the dropsy and jaundice, being steeped in wine and drunk. It helps those continual agues that come by the plenty of stubborn humours: and oil made thereof by setting it in the sun, with some laudanum added to it, provoketh sweating, the ridge of the back being anointed therewith, and thereby driveth away the shaking fits of the ague. It will not abide any long boiling, for it loseth its chief strength thereby; nor much beating, for the finer powder doth provoke vomits and urine, and the coarser purgeth downwards. The common use hereof, is to take the juice of five or seven leaves in a little drink to cause vomiting; the roots have also the same virtue, though they do not operate so forcibly; yet they are very effectual against the biting of serpents, and therefore are put as an ingredient both into mithridate and Venice treacle. The leaves and roots being boiled in lye, and the head often washed therewith while it is warm, comforteth, the head and brain that is ill-affected by taking cold, and helpeth the memory.

I shall desire ignorant people to forbear the use of the leaves; the roots purge more gently, and may prove beneficial to such as have cancers, or old putrified ulcers, or fistulas, upon their bodies, to take a dram of them in powder in a quarter of a pint of white wine in the morning. The truth is, I fancy purging and vomiting medicines as little as any man breathing, for they weaken nature, nor shall ever advise them to be used unless upon urgent necessity. If a physician be nature's servant, it is his duty to strengthen his mistress as much as he can, and weaken her as little as may be.

#### ASPARAGUS, SPARAGUS, OR SPERAGE. ASPARAGUS.

DESCRIPTION. IT rises up at first with divers white-green scaly heads, very brittle or easy to break while they are young; which afterwards rise up in very long and slender green stalks, of the bigness of an ordinary riding-wand at the bottom of

of most, bigger or less as the roots are of growth; on which are set divers branches of green leaves, shorter and smaller than fennel, to the top; at the joints whereof come forth small mossy yellowish flowers, which turn into round berries, green at the first, and of an excellent red colour when they are ripe, shewing like beads of coral, wherein are contained exceeding hard black seeds. The roots are dispersed from a spongeous head into many long, thick, and round, strings, whereby it sucketh much nourishment out of the ground, and increaseth plentifully thereby.

PRICKLY ASPARAGUS. *ASPARAGUS APHYLLUS.*

DESCRIPTION. It groweth usually in gardens, and some of it grows wild in Appleton-meadow, in Gloucestershire, where the poor people do gather the buds of young shoots, and sell them cheaper than our garden asparagus is sold in London.

TIME. They do for the most part flower, and bear their berries, late in the year, or not at all, although they are housed in winter.

GOVERNMENT AND VIRTUES. They are both under the dominion of Jupiter. The young buds or branches, boiled in ordinary broth, make the belly soluble and open, and, boiled in white wine, provoke urine, being stopped, and are good against the strangury, or difficulty of making water. It expelleth the gravel and stone out of the kidneys, and helpeth pains in the reins. If boiled in white wine or vinegar, it is prevalent for them that have their arteries loosened, or are troubled with the hip-gout, or sciatica. The decoction of the roots, boiled in wine and taken, is good to clear the sight; being held in the mouth, it easeth the tooth-ach; and, being taken fasting several mornings together, stirreth up bodily lust in man or woman, whatsoever some have written to the contrary. The garden asparagus nourisheth more than the wild, yet it hath the same effect in all the aforementioned diseases. The decoction of the root in white wine, and the back and belly bathed therewith, or kneeling or lying down in the same, or sitting therein as a bath, hath been found effectual against pains in the reins and bladder, pains of the mother and cholic, and generally against all pains that happen to the lower parts of the body: and is no less effectual against stiff and benumbed finews, or those that are shrunk by cramps and convulsions: it also helpeth the sciatica.

A S H - T R E E. *FRAXINUS.*

THIS is so well known, that time would be mis-spent in writing a description of it; and therefore I shall only insist upon the virtues of it.

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**GOVERNMENT AND VIRTUES.** It is governed by the Sun, and the young tender tops with the leaves taken inwardly, and some of them outwardly applied, are singularly good against the biting of the viper, adder, or any other venomous beast; and the water distilled therefrom, being taken in a small quantity every morning fasting, is a singular medicine for those that are subject to the dropsy, or to abate the bulk of those who are too gross or fat. The decoction of the leaves, in white wine, helpeth to break the stone and expel it, and cureth the jaundice. The ashes of the bark of the ash made into lye, those heads bathed therewith, which are leprous, scabby, or scald, are thereby cured. The kernels within the husks, commonly called ashen keys, prevail against stitches and pains in the side, proceeding from wind, and void the stone by provoking urine.

**AVENS, called also CLOVE-WORT, and HERB BENET. GEUM.**

**DESCRIPTION.** THE ordinary avens hath many long, rough, dark-green, winged, leaves, rising from the root, every one made of many leaves, set on each side of the middle rib, the largest three whereof grow at the end, and are snipped or dented round about the edges; the other being small pieces, sometimes two, and sometimes four, stand on each side of the middle rib underneath them: among which do rise up divers rough or hairy stalks, about two feet high, branching forth with leaves at every joint, and not so long as those below, but almost as much cut in on the edges, some into three parts, some into more. On the tops of the branches stand small pale yellow flowers, consisting of five leaves, like the flowers of cinquefoil, but larger, in the middle whereof standeth a large green head, which, when the flower is fallen, groweth rough and round, being made of many long greenish purple seeds, like grains, which will stick upon your clothes. The root consists of many brownish strings or fibres, smelling somewhat like unto cloves, especially those which grow in the higher, hotter, and dryer, grounds, and in the free and clear air.

**PLACE.** They grow wild in many places under hedge-sides, and by the pathways in fields; yet they rather delight to grow in shadowy than sunny places.

**TIME.** They flower in May and in June for the most part, and their seed is ripe in July at the latest.

**GOVERNMENT AND VIRTUES.** It is governed by Jupiter, and that gives hopes of a wholesome healthful herb. It is good for the diseases of the chest or breast, for pains and stitches in the sides, and to expel crude and raw humours from the belly and stomach, by the sweet favour and warming quality; it dissolveth the inward

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congealed blood, occasioned by falls or bruises, and the spitting of blood, if the roots, either green or dried, be boiled in wine and drunk; as also all manner of inward or outward wounds, if they be washed or bathed therewith. The decoction also being drunk, comforteth the heart, and strengtheneth the stomach and a cold brain, and therefore is good in the spring-time to open obstructions of the liver, and helpeth the wind-cholic; it also helps those that have fluxes, or are bursten, or have a rupture; it taketh away spots and marks in the face, being washed therewith. The juice of the fresh root, or powder of the dried root, hath the same effect with the decoction. The root in the spring-time steeped in wine doth give it a delicate favour and taste, and, being drunk fasting every morning comforteth the heart, and is a good preservative against the plague, or any other poison; it helpeth digestion, and warmeth a cold stomach, and openeth obstructions of the liver and spleen. It is very safe, (you need have no dose prescribed,) and it is very fit to be kept in every body's house.

#### A L M O N D - T R E E. AMYGDALUS.

**DESCRIPTION and NAMES.** OF this tree there are two kinds, the one bears sweet fruit, the other bitter; they grow bigger than any peach-tree. I have seen a bitter-almond-tree in Hampshire as big as a great plum-tree. It hath leaves much like peach-leaves, and is called in Latin *amygdalum*; they grow plentifully in Turkey and Barbary.

**NATURE AND VIRTUES.** The sweet almonds are hot and moist in the first degree, the bitter dry in the second. It is a plant of Jupiter. The almoids nourish the body, and increase the feed; they strengthen the breath, cleanse the kidneys, and open the passages of urine. There is a fine pleasant oil drawn out of the sweet almonds, which, being taken with sugar-candy, is excellent against dry coughs and hoarsenes; it is good for those that have any inward sore, and for such as are troubled with the stone, because it makes slippery the passages of the urine. Bitter almonds also open obstructions of the liver and spleen, cleanse the lungs from phlegm, provoke urine; they expel wind, and provoke women's courses; the oil of them kills worms, and helps pains of the womb. Some write that bitter almonds preserve from drunkenness, five or six being eaten fasting; the oil of both cleanse the skin; it easeth pains of the head, the temples being anointed therewith; and the oil, with honey, powder of liquorice, oil of roses, and white wax, makes a good ointment for dimness of sight. Also almond butter is very good for a stuffed breast; this kind of butter is made of almonds with sugar and rose-water, which, being eaten with violets,

is ver y wholesome and commodious for students, for it rejoiceth the heart, and comforteth the brain, and qualifieth the heat of the liver.

### ACONITE, OR WOLF's-BANE. ACONITUM.

OF this there are two sorts, the one bearing blue flowers, the other yellow; the yellow is called *wolf's-bane*, and the blue is generally known by the name of *monk's-hood*.

**DESCRIPTION.** The wolf's bane which beareth the blue flower is small, but groweth up a cubit high; the leaves are split and jagged, the flowers in long rows toward the tops of the stalks gaping like hoods; on the hoary root groweth as it were a little knob, wherewith it spreadeth itself abroad and multiplieth.

**PLACE.** The monk's-hood, or blue wolf's-bane, is very common in many gardens; the other rarely found but in the gardens of some curious herbalists; but grow-  
eth in forests and dark low woods and valleys in some parts of Germany and France.

**TIME.** They flower in April, May, and June.

**GOVERNMENT AND DANGER.** The plants are hot and dry in the fourth degree, of a martial venomous quality; if they be inwardly taken, they inflame the heart, burn the inward parts, and destroy life it self. Dodonæus reporteth of some men at Antwerp, who unawares did eat some of the monk's-hood in a fallad, instead of some other herb, and died forthwith: this I write, that people who have it in their gardens might beware of it.

### ALOE, OR ALOES. ALOE.

**NAMES.** BY the same name of aloe or aloes is the condensed juice of this plant called in all parts of Europe; the plant is also called sea-housleek, and sea-ay-green.

**DESCRIPTION.** This plant hath very long leaves, thick and set round about with short points or crests, standing wide one from another; the root is thick and long; all the herb is of a strong favour, and bitter taste; out of this herb is drawn a juice, which is dried, and called aloes in different parts of the world.

**PLACE.** Aloe groweth very plenteously in India, and from thence cometh the best juice; it groweth also in many places of Asia and Arabia, near the sea-side; but the juice thereof is not so good as that of India.

**GOVERNMENT AND VIRTUES.** It is a martial plant, hot in the second degree, and dry in the third, of a very bitter taste; the juice, being refined and clarified from its dross, is of a clear and blackish clean brown colour; it openeth the belly, and purgeth cold phlegmatic and choleric humours, which overburthen and hurt the stomach: it is the basis in almost all pills; it comforteth, cleanseth, and drieth up superfluous

superfluous humours. It may be taken with cinnamon, ginger, mace, galengal, or aniseed, to assuage or drive away pains of the stomach, and to comfort and warm the same, and expel phlegm; the same is also good against the jaundice and spitting of blood. Aloe made into powder, and strewed upon new bloody wounds, stoppeth the blood and healeth the wound; likewise, being applied upon old ulcers, it closeth them up, and is a sovereign medicine for ulcers about the secret parts and fundament. The same, boyled with honey, healeth rifts and outgrowings of the fundament, and stoppeth the flux of the hemorrhoids; and, being applied with honey, it taketh away black spots that come by stripes or bruises; it is also good against inflammations, hurts, and scabs of the eyes, and against running and diarnes of the same. Aloes mixed with oil of roses and vinegar, and laid to the forehead and temples, assuageth the head-ach; the head being often rubbed with aloes mixed with wine, keepeth the hair from falling off. The same applied with wine cureth sores of the mouth and gums, the throat and kernels under the tongue; and outwardly applied is a good consolidative medicine; stoppeth bleeding, and doth modify and cleanse all corruption.

#### B A W M. MELISSA.

THIS herb is so well known to be an inhabitant in almost every garden, that I shall not need to write any description thereof, although the virtues of it, which are many, may not be omitted.

GOVERNMENT AND VIRTUES. It is an herb under Jupiter, and under Cancer, and strengthens nature much in all its actions.\* Let a syrup made with the juice of it and sugar, (as you shall be taught at the latter end of the book,) be kept in every gentlewoman's house, to relieve the weak stomachs and sick bodies of their poor and sickly neighbours, as also the herb kept dry in the house, that so, with other convenient simples, you may make it into an electuary with honey, according as the disease is, and you shall be taught at the latter end of the book. The Arabian physicians have highly extolled the virtues hereof, although the Greeks thought it not worth mentioning. Serapio saith, it causeth the mind and the heart to become merry, and reviveth the heart fainting into swooning, especially all such as are overtaken in their sleep, and driveth away all troublesome cares and thoughts out of the mind arising from melancholy or black choler; which Avicen also confirmeth. It is very good to help digestion and open obstructions of the brain; and hath such a

\* Pliny, when writing on bawm, informeth us, that if it be tied to the sword which gave the wound, it instantly stoppeth the blood.

purging quality, saith Avicen, as to expel those melancholy vapours from the spirits and blood which are in the heart and arteries, although it cannot do so in other parts of the body. Dioscorides saith, that the leaves steeped in wine, and the wine drunk, and the leaves externally applied, is a remedy against the sting of scorpions and the bitings of mad dogs; and commendeth the decoction thereof for women to bathe or sit in, to procure their courses; it is good to wash aching teeth therewith, and profitable for those that have the bloody flux. The leaves also with a little nitre taken in drink, are good against a surfeit of mushrooms, help the griping pains of the belly, and, being made into an electuary, are good for them that cannot fetch their breath with ease. Used with salt, it takes away wens, kernels, or hard swellings, in the flesh or throat; it cleanseth foul sores, and easeth pains of the gout. It is also good for the liver and spleen. A tansy or caudle made with eggs, and the juice thereof while it is young, putting to it some sugar and rose-water, is good for women in child-bed, when the afterbirth is not thoroughly voided, and for their faintings upon or after their sore travail. The herb bruised and boiled in a little wine and oil, and laid warm on a boil, will ripen and break it.

#### B A R B E R Y. B E R B E R I S.

The shrub is so well known to every boy and girl that hath but attained to the age of seven years, that it needs no description.

**GOVERNMENT AND VIRTUES.** Mars owns the shrub, and presents it to the use of my countrymen to purge their bodies of choler. The inner rind of the barberry-tree boiled in white wine, and a quarter of a pint drunk each morning, is an excellent remedy to cleanse the body of choleric humours, and free it from such diseases as choler causeth, such as scabs, itch, tetterers, ringworms, yellow jaundice, boils, &c. It is excellent for hot-agues, burnings, scaldings, heat of blood, heat of the liver, and bloody-flux; the berries are as good as the bark, and more pleasing; they get a man a good stomach to his victuals, by strengthening the attractive faculty, which is under Mars. The hair washed with the lye made of the ashes of the tree, and water, will make it turn yellow, viz. Mars' own colour. The fruit and rind of this shrub, the flowers of broom and of heath, or furze, cleanse the body of choler by sympathy, as the flowers, leaves, and bark, of the peach-tree, do by antipathy; because these are under Mars, that under Venus.

#### B A R L E Y. H O R D E U M.

THE continual usefulness hereof hath made all in general so acquainted with it, that it is altogether needless to describe the several kinds hereof plentifully growing, being yearly sown in this land; the virtues whereof take as followeth.

**GOVERNMENT AND VIRTUES.** It is a notable plant of Saturn: if you view diligently its effects by sympathy and antipathy, you may easily perceive a reason of them, as also why barley-bread is so unwholesome for melancholy people. Barley in all the parts and compositions thereof, except malt, is more cooling than wheat, and a little cleansing; and all the preparations thereof, as barley-water, and other things made thereof, do give great nourishment to persons troubled with fevers, agues, and heats in the stomach. A poultice made of barley-meal or flour, boiled in vinegar and honey, and a few dry figs put into them, dissolveth all hard impostumes, and assuageth inflammations, being thereto applied; and being boiled with melilot and camomile flowers, and some linseed, fenugreek, and rue in powder, and applied warm, it easeth pains in the side and stomach, and windiness of the spleen. The meal of barley and flea-wort boiled in water, and made into a poultice with honey and oil of lilies, applied warm, cureth swellings under the ears, throat, neck, and such like; and a plaster made thereof with tar, wax, and oil, helpeth the king's evil in the throat: boiled with sharp vinegar into a poultice, and laid on hot, helpeth the leprosy: being boiled in red wine, with pomegranate-rinds and myrtle, stayeth the lask or other flux of the belly: boiled with vinegar and a quince, it easeth the pains of the gout. Barley-flour, white salt, honey, and vinegar, mingled together, take away the itch speedily and certainly; the water distilled from the green barley in the end of May, is very good for those that have defluxions of humours fallen into their eyes, and easeth the pains, being dropped into them: or white bread steeped therein and bound on to the eyes, doth the same.

#### GARDEN OR SWEET BASIL. OCYMUM.

**DESCRIPTION.** THE greater ordinary basil riseth up usually with one upright stalk, diversely branching forth on all sides, with two leaves at every joint which are somewhat broad and round, yet pointed, of a pale green colour, but fresh, a little snipt about the edges, and of a strong heady scent. The flowers are small and white, standing at the tops of the branches, with two small leaves at the joints, in some places green, in others brown, after which come black seed. The root perisheth at the approach of winter, and therefore must be new sown every year.

**PLACE.** It groweth in gardens only.

**TIME.** It must be sowed late, and flowers in the heat of the summer, being a very tender plant.

**GOVERNMENT AND VIRTUES.** With respect to the qualities of this herb, most authors differ; Galen and Dioscorides hold it not fitting to be taken inwardly, as

does also Chrysippus; but Pliny and the Arabian physicians defend it. For mine own part, I presently found that speech true; *Non nostrum inter nos tantas compонere lites*, "It is not for me to adjust such grave disputes;" and away to Dr. Reason went I, who told me it was an herb of Mars, and under the Scorpion, and perhaps therefore called basilicon, and then no marvel if it carries a kind of virulent quality with it. Being applied to the place bitten by a venomous beast, or stung by a wasp or hornet, it speedily draws the poison to it. Every like draws its like. Mizaldus affirms, that if it be laid to rot in horse-dung, it will breed venomous beasts; and Hollerius, a French physician, affirms upon his own knowledge, that an acquaintance of his, by common smelling to it, had a scorpion bred in his brain. Something is the matter, this herb and rue will not grow together, no, nor near each other: and we know that rue is as great an enemy to poison as any that grows. To conclude, it expelleth both birth and after-birth; and, as it helps the deficiency of Venus in one kind, so it spoils all her actions in another.

#### B A Y - T R E E. LAURUS.

THIS is so well known, that it needs no description: I shall therefore only write the virtues thereof, which are many.

GOVERNMENT AND VIRTUES. I shall but only add a word or two to what my friend hath written, viz. That it is a tree of the Sun, and under the celestial sign Leo, and resisteth witchcraft very potently, as also all the evils old Saturn can do to the body of man, and they are not a few; for it is the speech of one, and I am mistaken if it were not Mizaldus, that neither witch nor devil, thunder nor lightning, will hurt a man in the place where a bay-tree is. Galen faith, that the leaves or bark do dry and heal very much, and the berries more than the leaves. The bark of the root is less sharp and hot, but more bitter, and hath some abstraction withal, whereby it is effectual to break the stone; and good to open obstructions of the liver, spleen, and other inward parts, which bring the dropsy, jaundice, &c. The berries are very effectual against the poison of venomous creatures, and the stings of wasps and bees, as also against the pestilence, or other infectious diseases, and therefore is put in sundry treacles for that purpose; they likewise procure women's courses; and seven of them given to a woman in sore travail of childbirth do cause a speedy delivery, and expel the after-birth, and therefore not to be taken but by such as have gone out their time, lest they procure abortion, or cause labour too soon: they wonderfully help all cold and rheumatic distillations from the brain to the eyes, lungs, or other parts; and, being made into an electuary with honey, do help the consumption, old coughs, shortness of breath, and thin rheums; as also,

the megrim; they mightily expel wind, and provoke urine, help the womb, and kill worms: the leaves also work the like effects. A bath, of the decoction of the leaves and berries, is singularly good for women to sit in, that are troubled with diseases of the womb, or the stoppings of their courses, or for the diseases of the bladder, pains in the bowels by wind, and stopping of urine. A decoction likewise of equal parts of bay-berries, cummin-seed, hyssop, origanum, and euphorbium, with some honey, and the head bathed therewith, doth wonderfully help distillations and rheums, and settleth the palate of the mouth into its place. The oil made of the berries is very comfortable in all cold griefs of the joints, nerves, arteries, stomach, belly, or womb; and helpeth palseies, convulsions, cramps, aches, trembling and numbness in every part; also weariness, and pains that come by sore travellings; all grief and pains likewise proceeding from wind, either in the head, stomach, back, belly, or womb, by anointing the parts affected therewith; and pains in the ears are also cured by dropping in some of the oil, or by receiving into the ears the warm fume of the decoction of the berries through a funnel. The oil takes away marks of the skin and flesh by bruises, falls, &c. and dissolveth the congealed blood in them: it helpeth also the itch, scabs, and wheals in the skin.

### B E A N S. V I C I A.

BOTH the garden and field beans are so well known, that it fayeth me the labour of writing any description of them.

**GOVERNMENT AND VIRTUES.** They are plants of Venus; and the distilled water of the flowers of garden-beans is good to cleanse the face and skin from spots and wrinkles, and the meal or flower of them, or the small bean, doth the same. The water distilled from the green husks, is held to be very effectual against the stone, and to provoke urine. Bean-flour is used in poultices, to assuage inflammations rising upon wounds, and the swelling of women's breasts caused by the curdling of their milk, and reppresseth their milk. The flour of beans and fenugreek mixed with honey, and applied to felons, boils, bruises, or blue marks by blows, or the imposthumes in the kernels of the ears, helpeth them all; and with rose-leaves, frankincense, and the white of an egg, being applied to the eyes, helpeth them that are swoln, or do water, or have received any blow upon them, if used with wine. If a bean be parted in two, the skin being taken away, and laid on the place where a leech hath been set that bleedeth too much, it stayeth the bleeding. Bean-flour boiled to a poultice with wine and vinegar, and some oil put thereto, easeth both pain and swelling of the scrotum: the husks boiled in water to a consumption of a

third part thereof, stayeth a lask ; and the ashes of the husks, made up with old hog's grease, helpeth the old pains, contusions, and wounds, of the sinews, the sciatica, and gout. The field-beans have all the afore-mentioned virtues as the garden-beans. Beans eaten are extreme windy meat, but if after the Dutch fashion, when they are half-boiled, you husk them and stew them, they are wholesomer food.

FRENCH-BEANS. *PHASEOLUS.*

**DESCRIPTION.** THE French or kidney bean ariseth up at first but with one stalk, which afterward divideth itself into many arms or branches, but all so weak, that, if they be not sustained with sticks or poles, they will lie fruitless upon the ground; at several places of these branches grow forth long foot-stalks, with every one of them three broad, round, and pointed, green leaves at the end of them, towards the top whereof come forth divers flowers made like unto pease-blossoms, of the same colour for the most part that the fruit will be of, that is to say, white, yellow, red, blackish, or of a deep purple, but white is the most usual; after which come long and slender flat kids, some crooked, some straight, with a string as it were running down the back thereof, wherein are contained flattish round fruit, made to the fashion of a kidney; the root is long, spreadeth with many strings annexed to it, and perisheth every year.

There is also another sort of French-bean commonly growing with us in this land, which is called the scarlet-flowered bean. This ariseth up with sundry branches as the other, but runs up higher to the length of hop-poles, about which they grow twining, but turning contrary to the sun; they have foot-stalks with three leaves on each, as on the other: the flowers also are in fashion like the other, but many more set together, and of a most orient scarlet colour. The beans are larger than the ordinary kind, of a deep purple colour, turning black when it is ripe and dry: the root perisheth also in winter.

**GOVERNMENT AND VIRTUES.** These also belong to Venus, and, being dried and beaten to powder, are great strengtheners of the kidneys: neither is there a better remedy than it, if taken a dram at a time in white wine, to prevent the stone, or to cleanse the kidneys of gravel or stoppage. The ordinary French-beans are of an easy digestion; they move the belly, provoke urine, enlarge the breast that is straitened with shortness of breath, engender sperm, and incite to venery. And the scarlet-coloured beans, on account of the glorious beauty of their colour, being set near a quickset hedge, will greatly adorn the same by climbing up thereon, so that they may discerned a great way, not without admiration of the beholder at a distance. But they will go near to kill the quicksets by clothing them in scarlet.

## LADY's BED-STRAW. GALIUM.

BESIDES the common name above written, it is called cheese-rennet, because it performs the same office; as also gallion, pertimugget, and maid's-hair; and by some wild rosemary.

**DESCRIPTION.** This riseth up with divers small, brown, and square, upright stalks, a yard high, or more, sometimes branched forth into divers parts, full of joints, and with divers very fine small leaves at every one of them, little or nothing rough at all: at the tops of the branches grow many long tufts or branches of yellow flowers, very thick set together, from the several joints, which consist of four leaves each, which smell somewhat strong, but not unpleasant: the seed is small and black like poppy-seed: two for the most part joined together: the root is reddish, with many small threads fastened unto it, which take strong hold of the ground, and creepeth a little; and the branches, leaning a little down to the ground, take root at the joints thereof, whereby it is easily increased.

There is also another sort of lady's bed-straw growing frequently in England, which beareth white flowers as the other doth yellow: but the branches of this are so weak, that unless it be sustained by the hedges, or other things near which it groweth, it will lie down on the ground; the leaves are a little bigger than the former, and the flowers are not so plentiful as those; and the root hereof is also thready and abiding.

**PLACE.** They grow in meadows and pastures, both wet and dry, and by the sides of hedges.

**TIME.** They flower in May for the most part, and the seed is ripe in July and August.

**GOVERNMENT AND VIRTUES.** They are both herbs of Venus, and therefore strengthen the parts, both internal and external, which she rules. The decoction of the former of these, being drunk, is good to fret and break the stone, provoke urine, stay inward bleedings, and to heal inward wounds: the herb or flower bruised, and put up into the nostrils, stayeth their bleeding likewise: the flowers and the herb being made into an oil by being set in the sun, and changed after it hath stood ten or twelve days; or into an ointment, being boiled in axungia, or fadad oil with some wax melted therein after it is strained; either the oil made thereof or the ointment helpeth burnings with fire, or scalding with water: the same also, or the decoction of the herb and flower, is good to bathe the feet of travellers and lacquais whose long running causeth weariness and stiffness in their sinews and joints; if the decoction be used warm, and the joints afterwards anointed with the ointment,

ointment, it helpeth the dry scab, and the itch in children: and the herb with the white flower is also very good for the sinews, arteries, and joints, to comfort and strengthen them after travel, cold, and pains.

## BEETS. BETA.

DESCRIPTION. OF beets there are two sorts, which are best known generally, and whereof I shall principally treat at this time, viz. the white and red beets; and their virtues.

The common white beet hath many great leaves next the ground; somewhat large, and of a whitish-green colour; the stalk is great, strong, and ribbed, bearing great store of leaves almost to the very top of it: the flowers grow in very long tufts, small at the ends, and turning down their heads, which are small, pale, greenish-yellow, burs, giving cornered prickly seed. The root is great, long, and hard; and, when it hath given seed, is of no use at all.

The common red beet differeth not from the white, but only it is less, and the leaves and roots are somewhat red: the leaves are differently red, in some only with red strakes or veins, some of a fresh red, and others of a dark red. The root is spungy, and not used to be eaten.

GOVERNMENT AND VIRTUES. The government of these two sorts of beet are far different; the red beet being under Saturn, and the white under Jupiter; therefore take the virtues of them apart, each by itself. The white beet doth much loosen the belly, and is of a cleansing digesting quality, and provoketh urine: the juice of it openeth obstructions both of the liver and spleen, and is good for the head-ach, and swimmings therein, and turnings of the brain; and is effectual also against all venomous creatures; and, applied to the temples, stayeth inflammations in the eyes; it helpeth burnings, being used without oil; and, with a little alum putt to it, is good for St. Anthony's fire. Beet is hot and dry, and loosens the belly by reason of its nitrosity. It is an errhine, especially the root, for the juice of it received into the nostrils occasions freezing; the young plants, with their roots, gently boiled and eaten with vinegar, procure an appetite, extinguish thirst, and suppress choler in the stomach. Beet among the ancients was much noticed for its insipid taste. MARTIAL reproaches it in the following distich:

*Ut sapiæ fatuæ fabrorum prandia betæ,  
O quam sæpe petet vina piperque coquus?*

Insipid beet may bid a tradesman dine;  
But asks of thee abundant spice and wine.

The juice of this herb drawn up into the nostrils powerfully evacuates phlegmatic humours

humours from the brain, and cures inveterate head-achs. This is counted a great secret by some. It is also good for all wheals, pushes, blisters, and blains, in the skin; the herb boiled, and laid upon chilblains or kibes, helpeth them: the decoction thereof in water and some vinegar, healeth the itch, if bathed therewith, and cleanseth the head of dandriff, scurf, and dry scabs, and doth much good for fretting and running sores, ulcers, and cankers, in the head, legs, or other parts; and is much commended against baldness and shedding of hair.

The red beet is good to stay the bloody flux, women's courses, and the whites, and to help the yellow jaundice. The juice of the root, put into the nostrils, purgeth the head, helpeth the noise in the ears, and the tooth-ach; the juice snuffed up the nose helps a stinking breath, if the cause lies in the nose, as many times it doth, if any bruise have been there; as also want of smell coming that way.

#### WATER-BETONY. SEROPHULARIA.

CALLED also broomwort, and in Yorkshire bishop's leaves.

**DESCRIPTION.** Water-betony riseth up with square, hard, greenish, stalks, sometimes brown, set with broad dark-green leaves, dented about the edges with notches, somewhat resembling the leaves of the wood-betony, but much larger, two for the most part set at a joint; the flowers are many, set at the top of the stalks and branches, being round-bellied, open at the brims, and divided into two parts, the uppermost being like a hood, and the lower like a lip hanging down, of a dark red colour, which passing away, there come in their places small round heads, with small points in the ends, wherein lie small and brownish seeds: the root is a thick bush of strings and threads growing from the head.

**PLACE.** It groweth by ditch-sides, brooks, and other water-courses, generally through this land, and is seldom found far from the water-sides.

**TIME.** It flowereth about July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** Water-betony is an herb of Jupiter in Cancer, and is appropriated more to wounds and hurts in the breast than wood-betony, which follows. It is an excellent remedy for sick hogs. It is of a cleansing quality; the leaves bruised and applied, are effectual for all cold and filthy ulcers; and especially if the juice of the leaves be boiled with a little honey, and then dipped therein, and the sores dressed therewith: as also for bruises or hurts, whether inward or outward. The distilled water of the leaves is used for the same purposes; as also to bathe the face or hands spotted or blemished, or discoloured by sun-burning. Pliny saith that serpents, if they are inclosed or surrounded with this herb, will immediately begin fighting, and kill each other presently.

I confess I do not much fancy distilled waters, I mean such waters as are distilled cold; some virtue of the herb they may happen to have, it were a strange thing else; but this I am confident of, that being distilled in a pewter still, as the vulgar fashion is, both chemical oil and salt are left behind, unless you burn them, and then all is spoiled, even the water, which was good for as little as can be by such a distillation.

### WOOD BETONY. BETONICA.

**DESCRIPTION.** THE common or wood betony hath many leaves rising from the root, which are somewhat broad and round at the ends, roundly dented about the edges, standing upon long footstalks, from among which rise up small, square, slender but yet upright, hairy, stalks, with some leaves thereon, two apiece at the joints, smaller than the lower, whereon are set several spiked heads of flowers like lavender, but thicker and shorter for the most part, and of a reddish or purple colour, spotted with white spots both in the upper and lower part; the seeds, being contained within the husks that hold the flowers, are blackish, somewhat long and uneven. The roots are many white thready strings: the stalk perisheth, but the root, with some leaves thereon, abides all the winter. The whole plant is somewhat small.

**PLACE.** It groweth frequently in woods, and delighteth in shady places.

**TIME.** And it flowereth in July, after which the seed is quickly ripe, yet is in its prime in May.

**GOVERNMENT AND VIRTUES.** This herb is appropriated to the planet Jupiter, and under the sign Aries. Antonius Musa, physician to the emperor Augustus Cæsar, wrote a peculiar book on the virtues of this herb; and, amongst other virtues, saith of it, that it preserveth the lives and bodies of men from the danger of epidemical diseases, and from witchcrafts also. It is found by daily experience to be good for many diseases: it helpeth those that loathe or cannot digest their meat, those that have weak stomachs, or sour belchings, or a continual rising in their stomach, using it familiarly either green or dry; either the herb or root, or the flowers drunk in broth, or meat, or made into conserve, syrup, water, electuary, or powder, as every one may best frame themselves unto, or as the time or season requireth: taken any of the aforesaid ways, it helpeth the jaundice, falling sickness, the palsey, convulsions, or shrinking of the sinews; the gout, and those that are inclined to dropfies; and those that have continual pains in the head, although it turns to phrensy. The powder mixed with pure honey is no less available for all sorts of coughs or colds, wheezing or shortness of breath, distillations of thin

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rheum

rheum upon the lungs, which causeth consumptions. The decoction, made with mead and a little pennyroyal, is good for those that are troubled with putrid agues, whether quotidian, tertian, or quartan, and to draw down and evacuate the blood and humours, that by falling into the eyes doth hinder the sight: the decoction thereof made in wine, and taken, killeth the worms in the belly, openeth obstructions both of the liver and spleen, cureth stitches and pains in the back or side, the torments and griping pains of the bowels, and the wind-cholic: and mixed with honey purgeth the belly, helpeth to bring down women's courses, and is of special use for those that are troubled with the falling down of the womb and pains thereof, and causeth an easy and speedy delivery of women in child-birth; it helpeth also to break and expel the stone either in the bladder or kidneys. The decoction with wine, gargled in the mouth, easeth the tooth-ach; it is commended against the stinging or biting of venomous serpents or mad dogs, being used inwardly and applied outwardly to the place. A dram of the powder of betony taken with a little honey in some vinegar, doth wonderfully refresh those that are over wearied by travel; it stayeth bleeding at the mouth or nose, and helpeth those that pifs or spit blood, and those that are bursten or have a rupture, and is good for such as are bruised by any fall or otherwise. The green herb bruised, or the juice applied to any inward hurt, or outward green wound in the head or body, will quickly heal and close it up; as also any veins or finews that are cut; and will draw forth any broken bone or splinter, thorn, or other thing, gotten into the flesh; it is no less profitable for old sores or filthy ulcers, yea, though they be fistulous and hollow, but some do advise to put a little salt for this purpose; being applied with a little hog's lard, it helpeth a plague-fore, and other boils and pushes; the fume of the decoction while it is warm, received by a funnel into the ears, easeth the pains of them, destroyeth the worms, and cureth the running sores in them; the juice dropped into them doth the same. The root of betony is displeasing both to the taste and stomach, whereas the leaves and flowers, by their sweet and spicy taste, are comfortable both in meat and medicine.

These are some of the many virtues Antonius Musa appropriates to betony. It is a very precious herb, that is certain; and very proper to be kept in a man's house, both in syrup, conserve, oil, ointment, and plaster. The flowers are usually conserved.

#### B E E C H - T R E E. F A G U S.

IN treating of this tree, you must understand that I mean the great mast-beech, which is by way of distinction from that other small rough sort, called in Sussex the

the *small beach*, but in Essex *hornbeam*. I suppose it needless to describe it, being already so well known to my countrymen.

PLACE. It groweth in woods among oak and other trees ; and in parks, forests, and chases, to feed deer ; and in other places to fatten swine.

TIME. It bloometh in the end of April, or beginning of May, for the most part ; and the fruit is ripe in September.

GOVERNMENT AND VIRTUES. It is a plant of Saturn, and therefore performs his qualities and properties in these operations ; the leaves of the beech-tree are cooling and binding, and therefore good to be applied to hot swellings to discuss them ; the nuts do much nourish such beasts as feed thereon. The water that is found in the hollow places of decaying beeches, will cure both man and beast of any scurf, scab, or running tetter, if they be washed therewith. You may boil the leaves into a poultice, or make an ointment of them, when the time of year serves.

### B I L B E R R I E S. VACCINIUM.

THIS herb is also called by some, whorts, and whortle-berries.

DESCRIPTION. Of these, I shall only speak of two sorts, which are commonly known in England, viz. the black and red bilberries : and first of the black.

This small bush creepeth along upon the ground, scarcely rising half a yard high, with divers small dark-green leaves set on the green branches, not always one against another, and a little dented about the edges ; at the foot of the leaves come forth small hollow, pale, blush-coloured, flowers, the brims ending in five points, with a reddish thread in the middle, which pafs into small round berries, of the bigness and colour of Juniper berries, but of a purple sweetish sharp taste ; the juice of them giveth a purplish colour to their hands and lips that eat and handle them, especially if they break them. The root groweth aslope under ground, shooting forth in sundry places as it creepeth : it loseth its leaves in winter.

The red bilberry or whortle-bush riseth up like the former, having sundry harder leaves, like box-tree leaves, green and round pointed, standing on the several branches ; at the tops whereof only, and not from the sides as in the former, come forth divers round flowers, of a pale red colour, after which succeed round reddish fappy berries, which when ripe are of a sharp taste : the root runneth in the ground, as in the former, but the leaves of this abide all the winter.

PLACE. The first groweth in forests, as well as on heaths, and such-like barren places ; the red grows in the northern parts of this land, as Lancashire, Yorkshire, &c.

TIME. They flower in March and April, and the fruit of the black is ripe in June and July.

**GOVERNMENT AND VIRTUES.** They are under the dominion of Jupiter. It is a pity they are used no more in physic than they are. The black bilberries are good in hot agues, and to cool the heat of the liver and stomach; they do somewhat bind the belly, and stay vomitings and loathings: the juice of the berries made into a syrup, or the pulp made into a conserve with sugar, is good for the purposes aforesaid: as also for an old cough, or an ulcer in the lungs, or other diseases therein. The red whorts are more binding, and stop women's courses, spitting of blood, or any other flux of blood or humours, being used as well outwardly as inwardly.

#### B I F O I L, OR T W A Y B L A D E. OPHRYS.

**DESCRIPTION.** THIS small-herb, from a root somewhat sweet, shooting downwards many long strings, sendeth up a round green stalk, bare or naked next the ground for an inch, two, or three, to the middle thereof, as it is in age or growth, as also from the middle upwards to the flowers, having only two broad plantane-like leaves, but whiter, set at the middle of the stalk one against another, and compasseth it round at the bottom of them.

**PLACE.** It is an usual inhabitant in woods, coppices, and in many other places in this land.

There is another sort grows in wet grounds and marshes, which is somewhat different from the former: it is a smaller plant, and greener, having sometimes three leaves; the spike of the flowers is less than the former, and the roots of this do run or creep in the ground.

They are much and often used by many to good purposes, for wounds both green and old, and to consolidate or knit ruptures, being a plant of Saturn.

#### B I R C H - T R E E. BETULA.

**DESCRIPTION.** THIS groweth a goodly tall straight tree, fraught with many boughs and branches, bending downward, the old ones being covered with a discoloured chapped bark, and the younger being much browner: the leaves at first breaking out are crumpled, and afterward like beech-leaves, but smaller and greener, and dented about the edges; it beareth small short catkins, somewhat like those of the hazel-nut tree, which abide on the branches a long time, until, grown ripe, they fall on the ground, and their feed with them.

**PLACE.** It usually grows in woods.

**GOVERNMENT AND VIRTUES.** It is a tree of Venus; the juice of the leaves while young, or the distilled water of them, or the water that comes out of the tree,

ing bored with an augur, and distilled afterwards; any of these, being drunk for some time together, is available to break the stone in the kidneys or bladder, and is good also to wash sore mouths. The leaves of the birch-tree are hot and dry, cleansing, resolving, opening, and bitter; for which reason they are of no small use in a dropfy, the itch, and the like. The bark is bituminous, and is therefore mixed with perfumes that are to correct the air. The fungus of it has an astringent quality, upon which account it stops blood miraculously. This tree, in the beginning of spring, before the leaves come forth, being pierced, yields plentifully a sweet and potulent juice, which shepherds, when they are thirsty, often drink in the woods. Tragus, Helmont, Charleton, and others, commend the virtues and the efficacy of this liquor, and not undeservedly, for the stone in the kidneys and bladder, for bloody urine, and the strangury. This tree begins to yield its juice about the middle of February, and sometimes not till the beginning of March. Tragus also commends it for the jaundice. Some wash their faces with it, to take off spots and beautify the skin. Dr. Needham cured scorbutic consumptions with it; he used to mix with it good wine and honey. Rennet, infused in the juice, preserves cheese from worms. The juice of birch cures warts and pimples in the face, if it be washed with it in the day-time, morning and evening, and permitted to dry on.

USES. The wood of our birch is very white: women's shoe-heels and pattens, and packing-cases, are made of it. It is planted along with hazel, to make charcoal for forges. In the northern parts of Lancashire they make a great quantity of besoms with the twigs for exportation. The bark is of great use in dying wood yellow, and particularly in fixing fugacious colours. For this purpose it is best to use it dry, and to disbark trees of eighteen or twenty years' growth, at the time when the sap is flowing. The trees should stand, and be cut down the following winter. The black American birch may be applied equally well to the same purpose. The highlanders of Scotland use the bark for tanning leather, and for making ropes; and sometimes they burn the outer rind instead of candles. With the fragments dexterously braided, the Laplanders make themselves shoes and baskets; they use large thick pieces set out, with a hole in the middle to fit the neck, for a furtout to keep off the rain. The Russians, Poles, and Norwegians, cover their houses with it, laying turf three or four inches thick over. In Kamtschatka they make hats and drinking-cups of it. The wood was formerly used by the Scotch highlanders for their arrows; but now, by the wheelwright, and for most rustic implements; by the turner, for trenchers, bowls, ladles, &c. and when of a proper size it will make tolerable gates, rails, &c. In France it is generally used for wooden shoes. It affords good fuel; some of the best charcoal; and the foot is a good lamp-black for printers' ink. The small branches serve the highlanders for hurdles,

and side-fences to their houses. The leaves afford good fodder to horses, kine, sheep, and goats. The seeds are the favourite food of the fiskin, or aberlevine; and this tree furnishes food to a variety of insects.

### BIRD'S-FOOT. ORNITHOPUS.

THIS small herb groweth not above a span high, with many branches spread upon the ground, set with many wings of small leaves; the flowers grow upon the branches, many small ones of a pale yellow colour being set at a head together, which afterwards run into small jointed pods, well resembling the claws of small birds, whence it took its name.

There is another sort of bird's-foot, in all things like the former, but a little larger, the flowers of a pale whitish red colour, and the pods distinct by joints like the other, but a little more crooked, and the roots do carry many small white knots or kernels amongst the strings.

PLACE. These grow on heaths, and in many open uncultivated places, in this land.

TIME. They flower and seed in the end of summer.

GOVERNMENT AND VIRTUES. They belong to Saturn, and are of a drying binding quality, and thereby very good to be used in wound-drinks, as also to apply outwardly for the same purpose. But the latter bird's-foot is found by experience to break the stones in the back or kidneys, and drive them forth, if the decoction thereof be taken; it also wonderfully helpeth the rupture, being taken inwardly, and outwardly applied to the place.

All salts have best operation upon the stone, as ointments and plasters have upon wounds; and therefore you may make a salt of this for the stone: the way to prepare it will be given in plainer terms in the Dispensatory at the latter end of this book.

### BISHOP'S WEEED. AMMI.

BESIDES the common name bishop's weed, it is usually known by the Greek name *ammi* and *amios*; some call it *Æthiopian cummin-seed*, and others cummin royal; as also herb William, and bulwort.

DESCRIPTION. Common bishop's weed riseth up with a round stalk, sometimes as high as a man, but usually no more than three or four feet, beset with divers small, long, and sometimes broad, leaves, cut in some places and dented about the edges, growing one against another, of a dark green colour, having sundry branches on them, and at the top small umbels of white flowers, which turn into small round brown seed, little bigger than parsley-seed, of a quick hot scent and taste. The root is white and stringy, perishing yearly after it hath feeded, and usually riseth again of its own sowing.

PLACE.

**PLACE.** It groweth wild in many places in England and Wales, as between Greenhythe and Gravesham.

**GOVERNMENT AND VIRTUES.** It is hot and dry in the third degree, of a bitter taste, and somewhat sharp withal; it provokes lust, (I suppose Venus owns it;) it digesteth humours, provoketh urine and women's courses, expelleth wind, and, being taken in wine, easeth pains and gripings in the bowels, and is good against the bitings of serpents; it is used to good effect in those medicines which are given to hinder the poisonous operation of cantharides upon the passage of the urine; being mixed with honey, and applied to black or blue marks coming of blows or bruises, it takes them away: and, being drunk or outwardly applied, it abateth the high colour of urine, and makes it pale; and the fumes thereof, taken with rosin or raisins, cleanse the womb.

### B I S T O R T. POLYGONUM.

IT is also called snakeweed, English serpentary, dragon-wort, osterich, and passions.

**DESCRIPTION.** This hath a thick, short, knobbed, root, blackish without, and somewhat reddish within, a little crooked or turned together, of a harsh astringent taste, with divers black threads hanging thereto, from whence spring up every year divers leaves, standing upon long footstalks, being somewhat broad and long like a dock-leaf, and a little pointed at the ends, but that it is of a bluish-green colour on the upper side, and of an ash-colour grey somewhat tinged with purple underneath, with divers veins therein; from among which rise up divers small and slender stalks, two feet high, almost naked and without leaves, or with very few, and narrow, bearing a spiky bush of pale flesh-coloured flowers, which being past, there abideth small seed, somewhat like forrel-seed, but larger.

There are other sorts of bistort growing in this land, but smaller in height, root, and stalks, and especially in the leaves. The root is blackish without and somewhat whitish within, of an austere binding taste, as the former.

**PLACE.** They grow in shadowy moist woods, and at the foot of hills, but are chiefly nourished up in gardens. The narrow-leaved bistort groweth in the north; in Lancashire, Yorkshire, and Cumberland.

**TIME.** They flower about the end of May, and the seed is ripe about the beginning of July.

**GOVERNMENT AND VIRTUES.** It belongs to Saturn, and is in operation cold and dry. Both the leaves and the roots have a powerful faculty to resist all poison: the root in powder taken in drink, expelleth the venom of the plague, the small-pox, measles, purples, or any other infectious disease, driving it out by sweating: the

decoction of the root, being drunk in wine, stayeth all manner of inward bleeding or spittings of blood, and any fluxes in the body of either man or woman, or vomiting. It is also very available against ruptures, or burstings, or bruises, or falls, dissolving the congealed blood, and easing the pains that happen thereupon; it also helpeth the jaundice. The water, distilled from both leaves and root, is a singular remedy to wash any place bitten or stung by any venomous creature; as also for any of the purposes before spoken of; and is very good to wash any running sores or ulcers. The decoction of the root in wine, being drunk, hindereth abortion or miscarriage in child-bearing. The leaves also kill the worms in children, and are a great help for them that cannot keep their water; if the juice of plantain be added thereto, and outwardly applied, it much helpeth the gonorrhœa, or running of the reins. A dram of the powder of the root taken in water, wherein some red-hot iron or steel hath been quenched, is also an admirable help thereto, so as the body be first prepared and purged from the offensive humours. The leaves, seed, and roots, are all very good in decoctions, drinks, or lotions, for inward or outward wounds or other sores; and the powder, strewed upon any cut or wound in a vein, stayeth the immoderate bleeding thereof; the decoction of the roots in water, whereto some pomegranate-peels and flowers are added, injected into the matrix, stayeth the access of humours to the ulcers thereof, and bringeth it to its right place being fallen down, and stayeth the immoderate flux of the courses. The root thereof, with pellitory of Spain and burnt alum, of each a like quantity, beaten small and made into a paste with some honey, and a little piece thereof put into a hollow tooth, or held between the teeth if there be no hollowness in them, stayeth the defluxion of rheum upon them, which causeth pain, and helps to cleanse the head, and void much offensive water. The distilled water is very effectual to wash sores or cancers in the nose, or any other part, if the powder of the root be applied therunto afterwards. It is good also to fasten the gums, and to take away the heat and inflammations that happen in the jaws, almonds of the throat, or mouth, if the decoction of the leaves, roots, or seeds bruised, or the juice of them, be applied; but the roots are most effectual to the purposes aforesaid.

#### B R A M B L E. RUBUS.

IT is also called blackberry-bush, and is so well known that it needs no description. Its virtues are as follow:

GOVERNMENT AND VIRTUES. It is a plant of Venus in Aries. You have directions at the latter end of the book for the gathering of all herbs, plants, &c. The reason why Venus is so prickly is because she is in the house of Mars. The buds

buds, leaves, and branches, while they are green, are of good use in the ulcers and putrid sores of the mouth and throat, and for the quinsey; and likewise to heal other flesh-wounds and sores: but the flowers and fruit unripe are very binding: they are also profitable for the bloody flux and lasks, and a fit remedy for spitting of blood. Either the decoction or powder of the root, being taken, is good to break or drive forth gravel and the stone in the reins and kidneys. The leaves and brambles, as well green as dry, are excellent good lotions for sores in the mouth or secret parts; the decoction of them and of the dried branches doth much bind the belly, and is good for too much flowing of women's courses; the berries or the flowers are a powerful remedy against the poison of the most venomous serpents, as well drunk as outwardly applied, and help the sores of the fundament, and the piles; the juice of the berries, mixed with juice of mulberries, doth bind more effectually, and help fretting and eating sores and ulcers wheresoever. The distilled water of the branches, leaves, flowers, or fruit, is very pleasant in taste, and very effectual in fevers and hot distempers of the body, head, eyes, and other parts, and for all the purposes aforesaid. The leaves boiled in lye, and the head washed therewith, heal the itch, and the running sores thereof, and make the hair black. The powder of the leaves strewed on cancers and running ulcers, doth wonderfully help to heal them. Some condensate the juice of the leaves, and some the juice of the berries, to keep for their use all the year for the purposes aforesaid.

### B L I G H T S. BLITUM.

**DESCRIPTION.** OF these there are two sorts commonly known, viz. white and red. The white hath leaves somewhat like unto beets, but smaller, rounder, and of a whitish-green colour, every one standing upon a small long footstalk: the stalk riseth up two or three feet high, with such-like leaves thereon; the flowers grow at the top in long round tufts or clusters, wherein are contained small and round seed; the root is very full of threads or strings.

The red blight is in all things like the white, but that its leaves and tufted heads are exceeding red at the first, and afterwards turn more purple.

There are other kinds of blights which grow wild, differing from the two former sorts but little, only the wild are smaller in every part.

**PLACE.** They grow in gardens, and wild in many places of this land.

**TIME.** They seed in August and September.

**GOVERNMENT AND VIRTUES.** They are all of them cooling, drying, and binding, serving to restrain the fluxes of blood in either man or woman, especially the red: which also stayeth the overflowing of women's reds, as the white

blight stayeth the whites in women. It is an excellent secret; you cannot well fail in the use: they are all under the dominion of Venus.

There is another sort of wild blight, somewhat like the other wild kinds, but have long spiked heads of greenish seed, seeming by the thick setting together to be all seed. This sort the fishes are delighted with, and it is a good and useful bait.

### B O R A G E; BORAGO. B U G L O S S; ANCHUSA.

THESE are so well known to the inhabitants of every garden, that I hold it needless to describe them.

To these I may add a third sort, which is not so common, nor yet so well known; and therefore I shall give you its name and description.

**N A M E.** It is called *langue de bœuf*: but why they should call one herb by the name of *bugloſs*, and another by the name of *langue de bœuf*, is to me a question, seeing one signifies ox-tongue in Greek, and the other signifies the same in French.

**D E S C R I P T I O N.** The leaves thereof are smaller than those of bugloſs, but much rougher, the stalk rising up about a foot and a half high, and is most commonly of a red colour: the flowers stand in scaly rough heads, being composed of many small yellow flowers, not much unlike to those of dandelion, and the seed flieth away in down as that doth: you may easily know the flowers by the taste, for they are very bitter.

**P L A C E.** It groweth wild in many places of the land, and may be plentifully found near London, as between Rotherhithe and Deptford, by the ditch fides; its virtues are held to be the same with borage and bugloſs, only this is something hotter.

**T I M E.** They flower in June and July, and the seed is ripe shortly after.

**G O V E R N M E N T A N D V I R T U E S.** They are all three herbs of Jupiter, and under Leo, all great cordials and strengtheners of nature. The leaves or roots are to very good purpose used in putrid and pestilential fevers, to defend the heart, and help to resist and expel the poison or the venom of other creatures: the seed is of like effect; and the seed and leaves are good to increase milk in women's breasts: the leaves, flowers, and seed, all or any of them, are good to expel pensiveness and melancholy, to clarify the blood, and to mitigate heat and fevers. The juice made into a syrup prevaileth much to all the purposes aforesaid, and is put with other cooling, opening, cleansing, herbs, to open obſtructions, and help the yellow jaundice, and, mixed with fumitory, to cool, cleanse, and temper, the blood, whereby it helpeth the itch, ringworms, and tetterers, or other spreading scabs or sores. The flowers candied, or made into a conſerve, are helpful in the former cases, but are chiefly used as a cordial, and are good for thoſe that are weak with long fickness,

and

and to comfort the heart and spirits of those that are in a consumption, or troubled with often swooning, or passions of the heart; the distilled water is no less effectual to all the purposes aforesaid, and helpeth the redness and inflammations of the eyes, being washed therewith: the dried herb is never used, but the green; yet the ashes thereof boiled in mead, or honey-water, are available against inflammations and ulcers in the mouth or throat, to wash and gargle it therewith. The roots of bugloss are effectual, being made into a licking electuary, for the cough, and to condensate thin phlegm, and rheumatic distillations upon the lungs.

#### B L U E-B O T T L E. CENTAUREA.

IT is called *syanus*, I suppose from the colour of it; hurt-sickle, because it turns the edge of the sickles that reap the corn; blue-blow, corn-flower, and blue-bottle.

**DESCRIPTION.** I shall only describe that which is most common, and in my opinion most useful. Its leaves spread upon the ground, being of a whitish-green colour, somewhat cut on the edges like those of corn-scabious, among which riseth up a stalk divided into divers branches, beset with long leaves of a greenish colour, either but very little indented or not at all; the flowers are of a blue colour, from whence it took its name, consisting of an innumerable company of small flowers, set in a scaly head, not much unlike those of knapweed; the seed is smooth, bright, and shining, wrapped up in a woolly mantle: the root perisheth every year.

**PLACE.** They grow in corn-fields, amongst all sorts of corn, pease, and beans, but not in tares: if you please to take them up from thence, and transplant them in your garden, especially toward the full of the moon, they will grow more double than they are, and many times change their colour.

**TIME.** They flower from the beginning of May to the end of harvest.

**GOVERNMENT AND VIRTUES.** As they are naturally cold, dry, and binding, so are they under the dominion of Saturn. The powder or dried leaves of the blue-bottle or corn-flower is given with good success to those that are bruised by a fall, or have broken a vein inwardly, and void much blood at the mouth; being taken in the water of plantain, horsetail, or the greater comfrey, it is a remedy against the poison of the scorpion, and resisteth all venoms and poisons: the seed or leaves taken in wine is very good against the plague, and all infectious diseases, and is very good in pestilential fevers. The juice put into fresh or green wounds doth quickly close the lips of them together, and is very effectual to heal all ulcers, and sores in the mouth; the juice dropped into the eyes taketh away the heat and inflammation in them: the distilled water of the herb hath the same properties, and may be used for the effect aforesaid.

## B R A N K - U R S I N E. ACANTHUS.

BESIDES the common name brank-urfine, it is also called bear's breech, and acanthus; though I think our English names more proper, for the Greek word *acanthus* signifies any thistle whatsoever.

**DESCRIPTION.** This thistle shoots forth very many large, thick, sad-green, smooth, leaves upon the ground, with a very thick and juicy middle rib; the leaves are parted with sundry deep gashes on the edge; the leaves remain a long time before any stalk appears; afterwards riseth up a reasonably-big stalk three or four feet high, and finely decked with flowers from the middle of the stalk upwards, for on the lower part of the stalk there is neither branch nor leaf; the flowers are hooded and gaping, being white in colour, and standing in brownish husks, with a small, long, undivided, leaf under each leaf; they seldom seed in our country; its roots are many, great, and thick, blackish without and whitish within, full of clammy sap; if you set a piece of them in a garden, defending it from the first winter's cold, it will grow and flourish.

**PLACE.** They are only nursed up in gardens in England, where they will grow very well.

**TIME.** It flowereth in June and July.

**GOVERNMENT AND VIRTUES.** It is an excellent plant under the dominion of the Moon: I could wish such as were studious would labour to keep it in their gardens. Its leaves being boiled, and used in clysters, are exceeding good to mollify the belly, and make the passage slippery; the decoction, drunk, is excellently good for the bloody flux; the leaves being bruised, or rather boiled, and applied like a poultice, are exceeding good to unite broken bones, and strengthen joints that have been put out; the decoction of either the leaves or roots being drunk, and the decocted leaves applied to the place, is excellent good for the king's evil that is broken and runneth, for by the influence of the Moon it reviveth the ends of the veins which are relaxed; there is scarcely a better remedy to be applied to such places as are burnt with fire than this is; for it fetcheth out the fire, and heals it without a scar; it is also an excellent remedy for such as are bursten, being either taken inwardly or applied to the place; in like manner used, it helps the cramp and the gout; it is excellent good in hectic fevers, and restores radical moisture to such as are in consumptions.

## B R I O N Y. BRYONIA.

IT is called wild-vine, wood-vine, tamus, and our lady's seal; the white is called white-vine by some, and the black black-vine.

**DESCRIPTION.** The common white briony groweth creeping upon the hedges, sending forth many long, rough, very tender, branches at the beginning, with many very rough broad leaves thereon, cut for the most part into five partitions, in form very like a vine-leaf, but smaller, rougher, and of a whitish or hoary-green colour, spreading very far, and twining with its small claspers, that come forth at the joints with the leaves, very fast on whatsoever standeth next to it; at the several joints also, especially towards the tops of branches, cometh forth a long stalk bearing many whitish flowers, together in a long tuft, consisting of small branches, each laid open like a star; after which come the berries, separated one from another more than a cluster of grapes, green at the first, and very red when they are thoroughly ripe; of no good scent, and of a most loathsome taste, provoking vomit. The root groweth to be exceeding great, with many long twines or branches growing from it, of a pale whitish colour on the outside, and more white within, and of a sharp, bitter, loathsome, taste.

**PLACE.** It groweth on banks, or under hedges, through this land, and the roots lie very deep.

**TIME.** It flowereth in July and August, some earlier and some later than others.

**GOVERNMENT AND VIRTUES.** They are furious martial plants: the roots of briony purge the belly with great violence, troubling the stomach, and burning the liver, and therefore not rashly to be taken, but, being corrected, are very profitable for the diseases of the head, as falling sickness, giddiness, and swimmings, by drawing away much phlegm and rheumatic humours that oppress the head, as also the joints and sinews; and therefore good for palsies, convulsions, cramps, and stitches in the side, and the dropsey; and, in provoking urine, they cleanse the reins and kidneys from the gravel and stone, by opening the obstructions of the spleen, and consuming the hardness and swellings thereof. If the juice be tempered with the meal of vetches or fenugreek, or boiled in oil till it be consumed, it will take away black or blue spots; and Galen affirmeth it is a plant profitable for tanners to thicken their leather hides with. The root spread upon a piece of sheep's leather, in the manner of a plaster, while it is fresh and green, takes away black or blue marks, and all scars and deformities of the skin; it breaks hard imposthumes, draws forth splinters and broken bones, dissolves congealed blood, and, being laid on and used upon the hip or huckle bone, shoulders, arms, or any other part where there is great pain, it takes it away in a short space, and works very effectually. The decoction of the root in wine, drunk once a-week at going to bed, cleanseth the womb, helpeth the rising thereof, and expelleth the dead child for fear of abortion; a dram of the root in powder taken in white wine bringeth down the courses; an electuary, made of the

roots and honey, doth mightily cleanse the chest of rotten phlegm; and wonderfully helpeth an old strong cough, those that are troubled with shortness of breath, and is very good for them that are bruised inwardly, to help to expell the clotted or congealed blood; the leaves, fruit, and root, do cleanse old and filthy sores, are good against all running and fretting cankers, gangrenes, and tetterers, and therefore the berries are by some country-people called tetter-berries. The root cleanseth the skin wonderfully from all black and blue spots, freckles, morphew, leprosy, foul scars, or other deformity whatsoeuer; as also all running scabs and manginefs are healed by the powder of the dried root or the juice thereof, but especially by the fine white hardened juice; the distilled water of the roots worketh the same effects, but more weakly: the root bruised, and applied of itself to any place where the bones are broken, helpeth to draw them forth, as also splinters and thorns in the flesh; and, being applied with a little wine mixed therewith, it breaketh boils, and helpeth whitlows on the joints.

For all these latter complaints, that is to say, sores, cankers, &c. apply it outwardly; and take my advice along with you; you shall find in the Dispensatory, among the preparations at the latter end, a medicine called *fæcula brioniæ*; take that and use it, (you have the way there how to make it,) and mix it with a little hog's grease, or other convenient ointment, and use it at your need.

As for the former diseases, where it must be taken inwardly, it purgeth very violently, and needs an abler hand to correct it than most country-people have; therefore it is a better way for them, in my opinion, to let the simple alone, and take the compound water of it, mentioned in my Dispensatory; and that is far more safe, being wisely corrected.

### B R O O K L I M E. VERONICA.

IT is also called water-pimpernel.

DESCRIPTION. It riseth from a creeping root, that shooteth forth strings at every joint as it runneth; it hath divers and sundry green stalks, round and fappy, with some branches on them; somewhat broad, round, deep, green, and thick, leaves set by couples thereon; from the bosom whereof shoot forth long footstalks, with sundry small blue flowers on them, that consist of five small round-pointed leaves each.

There is another sort, nothing differing from the former, but that it is larger, and the flowers of a pale-blue colour.

PLACE. They sometimes grow in small standing waters, but generally near water-cresses, and are sometimes sold for them in the markets.

TIME. They flower in June and July, giving seed the month after.

**GOVERNMENT AND VIRTUES.** It is a hot and biting martial plant: brooklime and water-cresses are generally used together in diet-drinks, with other things serving to purge the blood and body from ill humours that would destroy health; and are helpful for the scurvy: they do also provoke urine, and help to break the stone and pass it away; they provoke women's courses, and expel the dead child. Being fried with butter and vinegar, and applied warm, it helpeth all manner of tumours, swellings, and inflammations.

Such drinks ought to be made of sundry herbs according to the malady offending. I shall give a plain and easy rule for that purpose at the latter end of this book.

#### B U T C H E R's B R O O M. Ruscus.

IT is called ruscus and bruscus, knee-holm, knee-holly, knee-hulver, and pettigree.

**DESCRIPTION.** The first shoots that sprout from the root of butcher's broom are thick, whitish, and short, somewhat like those of asparagus, but greater; they, rising up to be a foot and a half high, are spread into divers branches, green, and somewhat crested with the roundness, tough and flexible, whereon are set somewhat broad and almost round hard leaves, and prickly pointed at the ends, of a dark green colour, two for the most part at a place, very close or near together; about the middle of the leaf, on the back and lower side from the middle rib, breaketh forth a small whitish-green flower, consisting of four small round-pointed leaves, standing upon little or no footstalk, and in the place whereof cometh a small round berry, green at the first, and red when it is ripe, wherein are two or three white hard round seeds contained; the root is thick, white and great at the head, and from thence fendoth forth divers thick, white, long, tough, strings.

**PLACE.** It groweth in coppices, and on heaths and waste-grounds, and oftentimes under or near holly-bushes.

**TIME.** It shootheth forth its young buds in the spring, and the berries are ripe in or about September: the branches or leaves abiding green all the winter.

**GOVERNMENT AND VIRTUES.** It is a plant of Mars, being of a gallant cleansing and opening quality; the decoction of the roots, made with wine, openeth obstructions, provoketh urine, helpeth to expel gravel and the stone, easeth the strangury and women's courses, as also the yellow jaundice and the head-ach; and, with some honey or sugar put therein, cleanseth the breast of phlegm, and the chest of much clammy humours gathered therein; the decoction of the root drunk, and a poultice made of the berries and leaves being applied, are effectual in knitting and consolidating broken bones, or parts out of joint. The common

way of using it, is to boil the roots of it and parsley, and fennel, and smallage, in white wine, and drink the decoction, adding the like quantity of grass-roots to them: the more of the roots you boil, the stronger will the decoction be; it works no ill effects, yet I hope you have wit enough to give the strongest decoction to the strongest bodies.

### B R O O M A N D B R O O M - R A P E. OROBANCHE.

TO spend time in writing a description hereof is altogether needless, it being so generally used by all the good housewives almost through this land to sweep their houses with, and therefore very well known to all sorts of people.

The broom-rape springeth up on many places from the roots of the broom, but more often in fields, or by hedge-sides, and on heaths. The stalk thereof is of the bigness of a finger or thumb, about two feet high, having a show of leaves on them, and many flowers at the top, of a deadish yellow colour, as also the stalks and leaves are.

PLACE. They grow in many places of this land commonly, and as commonly spoil all the land they grow in.

TIME. They flower in the summer months, and give their seed before winter.

GOVERNMENT AND VIRTUES. The juice or decoction of the young branches or seed, or the powder of the seed taken in drink, purgeth downwards, and draweth phlegmatic and watery humours from the joints, whereby it helpeth the dropsy, gout, sciatica, and pains in the hips and joints; it also provoketh strong vomits, and helpeth the pains of the fides, and swellings of the spleen; cleanseth also the reins or kidneys and bladder of the stone, provoketh urine abundantly, and hindereth the growing again of the stone in the body. The continual use of the powder of the leaves and seed doth cure the black-jaundice; the distilled water of the flowers is profitable for all the same purposes; it also helpeth surfeits, and altereth the fit of agues, if three or four ounces thereof, with as much of the water of the smaller centaury, and a little sugar put therein, be taken a little before the fit cometh, and the party be laid down to sweat in bed. The oil, or water, that is drawn from the ends of the green sticks heated in the fire, helps the tooth-ach. The juice of the young branches made into an ointment of old hog's-grease and anointed, or the young branches bruised and heated in oil or hog's-grease, and laid to the fides pained by wind, as in stitches, or the spleen, easeth them in once or twice using; the same boiled in oil, is the safest and surest medicine to kill lice in the head or body; and is an especial remedy for joint-achs and swollen knees that come by the falling down of humours.

The

The broom-rape also is not without its virtues. The decoction thereof in wine is thought to be as effectual to avoid the stone in the kidneys and bladder, and to provoke urine, as the broom itself. The juice thereof is a singular good help to cure as well green wounds as old and filthy sores and malignant ulcers; the insolate oil, wherein there has been three or four repetitions of infusion of the top stalks with the flowers, strained and cleared, cleanseth the skin from all manner of spots, marks, and freckles, that arise by the heat of the sun or the malignity of humours. As for the broom and broom-rape, Mars owns them; and it is exceeding prejudicial to the liver, I suppose by reason of the antipathy between Jupiter and Mars: therefore, if the liver be disaffected, administer none of it.

### BUCKSHORN PLANTAIN. PLANTAGO.

**DESCRIPTION.** THIS, being sown of seed, riseth up at the first with small, long, narrow, hairy, dark-green, leaves, like grafts, without any division or gash in them; but those that follow are gashed in on both sides the leaves into three or four gashes, and pointed at the ends, resembling the knags of a buck's horn, whereof it took its name; and, being well grown round about the root upon the ground, in order one by another, thereby resembling the form of a star, from among them rise up divers hairy stalks, about a hand-breadth high, bearing every one a small, long, spiky, head, like to those of the common plantain, having such-like bloomings and seed after them; the root is single, long, small, and stringy.

**PLACE.** They grow in dry sandy ground, as in Tothill-fields, Westminster, and many other places in this kingdom.

**TIME.** They flower and seed in May, June, and July; and their leaves, in a manner, abide green all the winter.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Saturn, and is of a drying and binding quality: this, boiled in wine and drunk, and some of the leaves applied to the hurt place, is an excellent remedy for the biting of the viper or adder, which I take to be one and the same; and, being also drunk, it helpeth those that are troubled with the stone in the reins or kidneys, by cooling the heat of the parts afflicted, and strengthening them; as also weak stomachs that cannot retain, but cast up, their meat; it stayeth bleedings at the mouth and nose, bloody urine, or the bloody flux, and stoppeth the lask of the belly and bowels; the leaves hereof bruised, and laid to their sides that have an ague, suddenly ease the fit; and the leaves and roots beaten with some bay-salt, and applied to the wrists, work the same effects. The herb boiled in ale or wine, and given for some mornings and evenings together, stayeth the distillations of hot and sharp rheum falling into the eyes from the head, and helpeth all sorts of sore eyes.

## BUCKSHORN. PLANTAGO.

IT is also called hartshorn, herbastella and herbastellaria, sanguinaria, herb-eve, herb-ivy, wart-cresses, and swine-cresses.

**DESCRIPTION.** It has many small and weak straggling branches trailing here and there upon the ground; the leaves are many, small, and jagged, not much unlike to those of buckshorn plantain, but much smaller, and not so hairy: the flowers grow among the leaves, in small, rough, whitish, clusters; the seeds are smaller and brownish, and of a bitter taste.

**PLACE.** They grow in dry, barren, and sandy, grounds.

**TIME.** They flower and seed with the other plantains.

**GOVERNMENT AND VIRTUES.** This is also under the dominion of Saturn; the virtues are held to be the same as buckshorn plantain, and therefore by old authors it is joined with it: the leaves, being bruised, and applied to warts, will make them consume and waste away in a short time.

## BUGLE. AJUGA.

BESIDES the name bugle, it is called middle-confound and middle-comfrey, brown bugle, and by some fickle-wort, and herb-carpenter, though in Sussex they call another herb by that name.

**DESCRIPTION.** This hath larger leaves than those of self-heal, but else of the same fashion, or rather a little longer; in some green on the upper side, and in others rather brownish, dented about the edges, somewhat hairy, as the square stalk is also, which riseth up to be half a yard high sometimes, with the leaves set by couples; from the middle almost whereof upwards stand the flowers together, with many smaller and browner leaves than the rest on the stalk below; set at distances, and the stalk bare between them; among which flowers are also small ones, of a bluish, and sometimes of an ash, colour, fashioned like the flowers of ground-ivy, after which come small, round, blackish, seed; the root is composed of many strings, and spreadeth upon the ground.

The white bugle differeth not in form or greatness from the former, saving that the leaves and stalks are always green, and the flowers are white.

**PLACE.** It grows in woods, coppices, and fields, generally throughout England; but the white-flowered bugle is not so plentiful as the other.

**TIME.** They flower from May till July, and in the mean time perfect their seed; the root, and the leaves next the ground, abiding all the winter.

**GOVERNMENT AND VIRTUES.** This herb belongeth to Venus: if the virtues of it make you in love with it, (as they will if you are wise,) keep a syrup of it to take

take inwardly, and an ointment and plaster of it to use outwardly, always by you. The decoction of the leaves and flowers, made in wine, and taken, dissolveth the congealed blood in those that are bruised inwardly by a fall or otherwise, and is very effectual for any inward wounds, thrusts, or stabs, in the body or bowels, and is a special help in all wound-drinks, and for those that are liver-grown as they call it. It is wonderful in curing all manner of ulcers and sores, whether new and fresh or old and inveterate, and even gangrenes and fistulas, if the leaves are bruised and applied, or the juice used to wash and bathe the places; and the same, made into a lotion with honey and alum, cureth all sores of the mouth or gums, be they ever so foul, or of long continuance; and worketh no less powerfully and effectually for such ulcers and sores as happen in the secret parts of man or woman. Being also taken inwardly, or outwardly applied, it helpeth those that have broken any bone, or have any member out of joint. An ointment, made with the leaves of bugle, scabious, and sanicle, bruised, and boiled in hog's grease until the herbs be dry, and then strained forth into a pot, for such occasions as shall require it, is so singularly good for all sorts of hurts in the body, that none who know its usefulness will be without it. The truth is, I have known this herb cure some diseases of Saturn, of which I have thought good to quote one. Many times such as give themselves much to drinking are troubled with strange fancies and sights in the night-time, and some with voices, as also with the disease called *ephialtes*, or the night-mare: I take the reason of this to be, according to Fernelius, a melancholy vapour, made thin by excessive drinking strong liquor, which flies up and disturbs the fancy, and breeds imaginations like itself, i. e. fearful and troublesome. These I have known cured by taking only two spoonfuls of the syrup of this herb about two hours after supper; when you go to bed: but whether this is done by sympathy or antipathy is rather doubtful; all that know any thing in astrology know that there is great antipathy between Saturn and Venus in matters of procreation; yea, such a one, that the barrenness of Saturn can be removed by none but Venus, nor the lust of Venus repelled by any but Saturn; but I am not yet of opinion it is done this way; my reason is, because these vapours, though in quality melancholy, yet by their flying upward seem to be something aerial; therefore I rather think it is done by sympathy, Saturn being exalted in Libra, the house of Venus.

#### B U R N E T. SANGUISORBA.

IT is also called pimpinella, bipenula, folbegrella, &c. Common garden burnet is so well known, that it needeth no description: but there is another sort which is wild, the description whereof take as followeth.

**DESCRIPTION.** The great wild burnet hath winged leaves rising from the roots like the garden burnet, but not so many: yet these leaves are at least twice as large as the other, and nicked in the same manner about the edges, of a greyish colour on the under side; the stalks are larger, and rise higher, with many such-like leaves set thereon, and greater heads at the tops, of a brownish-green colour: and out of them come small dark-purple flowers, like the former, but larger: the root is black and long like the other, but also greater; it hath almost neither scent nor taste therein, like the garden kind.

**PLACE.** The first grows frequently in gardens: the wild kind growth in divers counties of this kingdom, especially in Huntingdon and Northampton-shires in the meadows there; as also near London by Paneras church, and by a caufeway-side in the middle of a field by Paddington.

**TIME.** They flower about the end of June and beginning of July, and their seed is ripe in August.

**GOVERNMENT AND VIRTUES.** It is an herb the Sun challengeth dominion over, and is a most precious herb, little inferior to betony; the continual use of it preserves the body in health, and the spirits in vigour; for, if the Sun be the preserver of life under God, his herbs are the best in the world to do it by. They are accounted to be both of one property, but the smaller is the most effectual, because quicker and more aromatical; it is a friend to the heart, liver, and other principal parts of a man's body: two or three of the stalks with leaves put into a cup of wine, especially claret, are known to quicken the spirits, refresh and cheer the heart, and drive away melancholy: it is a special help to defend the heart from noisome vapours, and from infection of the pestilence, the juice thereof being taken in some drink, and the party laid to sweat immediately. They have also a drying and an astringent quality, whereby they are available in all manner of fluxes of blood, or humours, to staunch bleedings inward or outward, lasks, scourings, the bloody flux, women's too-abundant courses, the whites, and the choleric belchings and castings of the stomach. It is a singularly-good herb for all sorts of wounds both of the head and body, either inward or outward; for all old ulcers, or running cankers, and moist sores; to be used either by the juice or the decoction of the herb, or by the powder of the herb or root, or the water of the distilled herb, or an ointment by itself, or with other things to be kept. The seed is also no less effectual both to stop fluxes and dry up moist sores, being taken in powder inwardly in wine or steeled water, that is, wherein hot gads of steel have been quenched; or the powder of the seed mixed with the ointment.

## B U T T E R - B U R. TUSSILAGO.

THIS herb is called also *petafisis*.

**DESCRIPTION.** It rises up in February, with a thick stalk about a foot high, whereon are set a few small leaves, or rather pieces, and at the top a long spiked head of flowers, of a bluish, or deep-red, colour, according to the soil wherein it groweth; and, before the stalk with the flowers have been a month above ground, they will be withered and gone; and blown away with the wind, and the leaves will begin to spring, which being full blown are very large and broad, being somewhat thin and almost round, whose thick red footstalks, about a foot long, stand towards the middle of the leaves; the lower part being divided into two round parts, close almost one to another, of a pale green colour, and hoary underneath; the root is long, and spreadeth under the ground, being in some places no bigger than one's finger, in others larger, rather blackish on the outside, and white within, and of a very bitter and unpleasant taste.

**PLACE AND TIME.** They grow in low and wet grounds by rivers and water-sides; their flowers (as is said) rising and decaying in February and March, before the leaves, which appear in April.

**GOVERNMENT AND VIRTUES.** It is under the dominion of the Sun, and therefore is a great strengthener of the heart, and cheers the vital spirits. The excellent Fuschius, in his account of this herb, is most express, and records its virtue as wonderful in pestilential fevers; and this he speaks not from tradition, but his own experience. Were it needful to prove the sun gives light, it is scarcely less certain or less obvious, than that this root, beyond all things else, cures pestilential fevers, and is by long experience found to be very available against the plague, by provoking sweat; if the powder thereof be taken in wine, it also resisteth the force of any other poison; the root taken with zedoary and angelica, or without them, helps the rising of the mother; the decoction of the root in wine is singularly good for those that wheeze much, or are short-winded; it provoketh urine also and women's courses, and killeth flat and broad worms in the belly; the powder of the root doth wonderfully help to dry up the moisture of sores that are hard to be cured, and taketh away all spots and blemishes of the skin.

## B U R D O C K. ARCTIUM.

THEY are also called personata, bardona, lappa major, great burdock, and clotbur. It is so well known, even to the little boys who pull off the burs to throw and stick on each other, that I shall omit writing any description of it.

PLACE. It grows plentifully by ditches and water-sides, and by the highways almost every where throughout this land.

GOVERNMENT AND VIRTUES. Venus challengeth this herb for her own ; and by its seed or leaf you may draw the womb which way you please ; either upward, by applying it to the crown of the head, in case it falls out, or downward, in fits of the mother, by applying it to the soles of the feet ; or, if you would stay it in its place, apply it to the navel, and that is likewise a good way to stay the child in it. Bur-leaves are cooling, moderately drying, and discussing withal, whereby they are good for old ulcers and sores. A dram of the roots, taken with pine-kernels, helpeth them that spit foul, mattery, and bloody, phlegm ; the leaves, applied to the places troubled with the shrinking of the sinews or arteries, give much ease : the juice of the leaves, or rather the roots themselves, given to drink with old wine, doth wonderfully help the bitings of serpents : and the root beaten with a little salt, and laid on the place, suddenly easeth the pain thereof, and helpeth those that are bit by a mad dog : the juice of the leaves, taken with honey, provoketh urine, and remedieith the pain of the bladder : the seed being drunk in wine forty days together, doth wonderfully help the sciatica : the leaves bruised with the white of an egg, and applied to any place burnt with fire, take out the fire, give sudden ease, and heal it up afterwards. The decoction of them, fomented on any fretting sore or canker, stayeth the corroding quality, which must be afterwards anointed with an ointment made of the same liquor, hog's grease, nitre, and vinegar, boiled together. Its roots may be preserved with sugar, and taken fasting, or at other times, for the said purpose, and for consumptions, the stone, and the lask : the seed is much commended to break the stone, and causeth it to be expelled by urine, and is often used with other feeds, and things to that purpose.

### B U C K - W H E A T. POLYGONUM.

NAMES. IN most countries of England this grain goeth by the general name of French wheat, as in Hampshire, Surrey, Berkshire, Wiltshire, and Buckinghamshire, and especially in those barren parts of the counties where it is most usually sown and delighteth to grow ; it is also in many parts of England called buckwheat ; some take it to be the *erythrum* of Theophrastus, and the *ireo* of Pliny and it is called by Mathiolus *frumentum sarafenicum* ; the Dutch names are *bockweydt* and *buckenweydt*.

DESCRIPTION. It riseth up with round hollow reddish stalks, set with many leaves, each by itself on a stalk, which is broad and round, and lies forked at the bottom, small and pointed at the end, somewhat resembling an ivy-leaf, but that

that it is softer in handling ; at the top of the stalks come forth clusters of small white flowers, which turn into small three-cornered blackish seed, with a white pulp therein ; the root is small and thready.

**PLACE AND TIME.** It is said to have its original birth-place in Arabia, where-by it had the Latin name *frumentum farasenicum*, and was transplanted from thence into Italy ; but now is very commonly sown in most of our northern countries, where, for the use and profit made of it, many fields are sown therewith ; it is not usually sown before April, and sometimes in May, for at its first springing up a frosty night kills it all, and so it will do the flowers when it blossoms ; it is ripe at the latter of August, or the beginning of September, and will grow in a dry hungry ground, for which it is held as good as a dunging.

**GOVERNMENT AND VIRTUES.** This grain is attributed to Venus : it doth nourish less than wheat, rye, or barley, but more than millet or panic, and the bread or cakes made of the meal thereof doth easily digest, and soon pass out of the stomach, though some hold to the contrary ; it giveth small nourishment, though not bad ; but is withal a little flatulent, or windy ; yet country-people in divers parts of Germany and Italy do feed hereon as almost their only bread-corn, and are strong and lusty persons, following hard labour ; I never knew any bread or cakes made of it for people to eat in this country, but it is generally used to fatten hogs and poultry of all sorts, which it doth very exceedingly and quickly. The physical uses of it are these : it provoketh urine, increaseth milk, looseneth the belly, and, being taken in wine, is good for melancholy persons ; the juice of the leaves dropped into the eyes cleareth the sight.

### B L A C K B I N D - W E E D . T A M U S.

**N A M E.** IT is also called *with-wind*.

**D E S C R I P T I O N.** Black bind-weed hath smooth red branches, very small like threads, wherewith it wrappeth and windeth itself about trees, hedges, stakes, and every thing it can lay hold upon ; the leaves are like ivy, but smaller and more tender ; the flowers are white, and very small ; the seed is black, triangular or three-square, growing thick together ; every seed is closed and covered with a thin skin ; the root is small and tender as a thread.

**P L A C E.** It groweth in borders of fields and gardens, about hedges and ditches, and amongst herbs.

**T I M E.** It delivereth its seed in August and September, and afterwards perisheth.

**G O V E R N M E N T A N D V I R T U E S.** Bind-weed is a plant of Mercury, of a hot-

nature, and of subtle parts, having power to dissolve. The juice of the leaves, being drunk, doth loosen and open the belly; the leaves pounded, and laid to the grieved place, dissolve, waste, and consume, hard swellings.

### B A L S A M - T R E E. CLUYTIA.

THE Arabians call it *baleffan*, the Greeks βαλσαμον, and the Latins *balsamum*; the liquor they call *opobalsamum*, the berries or fruit of the tree *carpobalsamum*, and the sprigs or young branches thereof *zylobalsamum*.

**DESCRIPTION.** The balsam or balm-tree, in the most natural places where it groweth, is never very large, seldom more than eight or nine feet high, and in some places much lower, with divers small and straight slender branches issuing from them, of a brownish-red colour, especially the younger twigs, covered with a double bark, the red first, and a green one under it, which are of a very fragrant smell, and of an aromatical quick taste, somewhat astringent and gummy, cleaving to the fingers; the wood under the bark is white, and as insipid as any other wood; on these branches come forth, sparingly, and without order, many stalks of winged leaves, somewhat like unto those of the mastic-tree, the lowest and those that first come forth consisting but of three leaves, others of five or seven leaves, but seldom more; which are set by couples, the lowest small, the next bigger, and the uppermost largest of all; of a pale green colour, smelling and tasting somewhat like the bark of the branches, somewhat clammy also, and abide on the bushes all the year. The flowers are many and small, standing by three together on small stalks at the ends of the branches, made of six small white leaves a-piece, after which follow small brownish hard berries, little bigger than juniper-berries, small at both ends, crested on the sides, very like unto the berries of the turpentine-tree, of a very sharp scent, having a yellow honey-like substance in them, somewhat bitter, but aromatical in taste, and biting on the tongue like the *opobalsamum*; from the body hereof, being cut, there issueth forth a liquor (which sometimes floweth without scarring) of a thick whitish colour at the first, but which afterwards groweth oily, and somewhat thicker than oil in summer, and of so sharp a scent that it will pierce the nostrils of those that smell thereto; it is almost like unto oil of spike, but as it groweth older so it groweth thicker, and not so quick in the smell, and in colour becoming yellow like honey or brown thick turpentine.

**PLACE AND TIME.** The most reputed natural places where this tree hath been known to grow, both in these and former days, are Arabia Felix, about Mecca and Medina, and a small village near them called Bedrumia, and the hills, valleys,

and

and sandy grounds, about them, and the country of the Sabeans adjoining next thereunto ; and from thence transplanted into India and Egypt: it likewise grew on the hills of Gilead. It is reported, that the Queen of Sheba brought of the balsam-trees to Solomon, as the richest of her presents, who caused them to be planted in orchards, in the valley of Jericho, where they flourished, and were tended and yearly pruned, until they, together with the vineyards, in that country, were destroyed by that monster of mankind, the savage bestial Turk. It flowereth in the spring, and the fruit is ripe in autumn.

**GOVERNMENT AND VIRTUES.** This balsam tree is a solar plant, of temperature hot and dry in the second degree ; and is sweet in smell, being of thin parts, but the liquor or *opobalsamum* is of more thin parts than the plant itself ; the fruit or berries is very like it in quality, but far inferior thereunto in the subtilty ; the liquor or *opobalsamum* is of good use against the poisons or infections of vipers, serpents, and scorpions, the pestilence and spotted fever, and other putrid and intermissive agues that arise from obstructions and crude cold humours, to take a scruple or two in drink, for some days together, and to sweat thereon ; for this openeth the obstructions of the liver and spleen, and digesteth raw humours, cherishing the vital spirits, radical moisture, and natural heat ; and is very effectual in cold griefs and diseases of the head or stomach, helping the swimmings and turning of the brain, weak memories, and falling sicknes. It cleareth the eyes of films or skins, and easeth pains in the ears. It helpeth a cough, shortnes of breath, and consumption of the lungs, warming and drying up the distillations of rheums upon them, and all other diseases of the stomach proceeding of cold or wind ; the cold or windy distempers of the bowels, womb, or mother, which cause torments or pains, or the cold moistures procuring barrennes. It provoketh the courses, expelleth the dead and afterbirths, cures the flux of the whites and stopping of urine ; it cleanfeth the reins and kidneys, and expelleth the stome and gravel ; it is very good against the palsey, cramp, tremblings, convulsions, shrinking of the finews, and green wounds.

#### CABBAGES AND COLEWORTS. BRASSICA.

I SHALL spare a labour in writing a description of these, since almost every one that can but write at all may describe them from his own knowledge, they being generally so well known that descriptions are altogether needless.

**PLACE.** These are generally planted in gardens.

**TIME.** Their flowering-time is towards the middle or end of July, and the seed is ripe in August.

No. 8.

2 E

GOVERNMENT

GOVERNMENT AND VIRTUES. The cabbages or coleworts boiled gently in broth, and eaten, do open the body; but the second decoction doth bind the body: the juice thereof, drunk in wine, helpeth those that are bitten by an adder; and the decoction of the flowers bringeth down women's courses. Being taken with honey, it recovereth hoarseness or loss of voice; the often eating of them, well boiled, helpeth those that are entered into a consumption: the pulp of the middle ribs of colewort, boiled in almond-milk, and made up into an electuary with honey, being taken often, is very profitable for those that are pursy or short-winded; being boiled twice, and an old cock boiled in the broth, and drunk, it helpeth the pains and obstructions of the liver and spleen, and the stone in the kidneys; the juice boiled with honey, and dropped into the corner of the eyes, cleareth the sight, by consuming any film or cloud beginning to dim it; it also consumeth the canker growing therein. They are much commended, being eaten before meat, to keep one from surfeiting, as also from being drunk with too much wine, and quickly make a drunken man sober; for, as they say, there is such an antipathy or enmity between the vine and the colewort, that the one will die where the other groweth. The decoction of coleworts taketh away the pains and aches, and allayeth the swellings, of swoln or gouty legs and knees, wherein many gross and watery humours are fallen, the place being bathed therewith warm: it helpeth also old and filthy sores, being bathed therewith; and healeth all small scabs, pushes, and wheals, that break out in the skin: the ashes of colewort-stalks, mixed with old hog's grease, are very effectual to anoint the side of those that have had long pains therein, or any other place pained with melancholy and windy humours. Cabbages are extreme windy, whether you take them as meat or as medicine; but colewort-flowers are something more tolerable, and the wholesomer food of the two. The Moon challengeth the dominion of the herb.

#### S E A - C O L E W O R T . C R A M B E.

DESCRIPTION. THIS hath divers somewhat-long, broad, large, thick, wrinkled, leaves, crumpled upon the edges, growing each upon a several thick footstalk, very brittle, of a greyish-green colour; from among which riseth up a strong thick stalk, two feet high, or more, with some leaves thereon to the top, where it brancheth forth much, and on every branch standeth a large bush of pale whitish flowers, consisting of four leaves each: the root is somewhat large, and shooteth forth many branches under ground, keeping green leaves all the winter.

PLACE. They grow in many places upon the sea-coasts, as well on the Kentish as Essex shores; as, at Lid in Kent, Colchester in Essex, and divers other places, and in other counties, of this land.

**T I M E.** They flower and seed about the time the other kinds do.

**G O V E R N M E N T A N D V I R T U E S.** The Moon claims the dominion of these also. The broth, or first decoction, of the sea-colewort, doth, by the sharp, nitrous, and bitter, qualities therein, open the belly, and purge the body; it cleanseth and digesteth more powerfully than the other kind; the seed hereof, bruised and drunk, killeth worms: the leaves, or the juice of them, applied to sores or ulcers, cleanse and heal them, dissolve swellings, and take away inflammations.

### C A L A M I N T. MELISSA.

IT is called also mountain-mint.

**D E S C R I P T I O N.** It is a small herb, seldom rising above a foot high, with square hairy and woody stalks, and two small hoary leaves set at a joint, about the bigness of marjoram, or not much bigger; a little dented about the edges, and of a very fierce or quick scent, as the whole herb is; the flowers stand at several spaces of the stalks, from the middle almost upwards, which are small and gaping like the common mint, and of a pale blush colour; after which follow small, round, blackish, seeds; the root is small and woody, with divers small sprigs spreading within the ground: it abideth many years.

**P L A C E.** It groweth on heaths, and upland dry grounds, in many counties of this kingdom.

**T I M E.** They flower in July, and their seed is ripe quickly after.

**G O V E R N M E N T A N D V I R T U E S.** It is an herb of Mercury, and a strong one too, therefore excellent good in all afflictions of the brain; the decoction of the herb, being drunk, bringeth down women's courses, and provoketh urine; it is profitable for those that are bursten, or troubled with convulsions or cramps, with shortness of breath, or choleric torments or pains in the belly or stomach; it also helpeth the yellow jaundice, and, being taken in wine, stayeth vomiting; taken with salt and honey, it killeth all manner of worms in the body; it helpeth such as have the leprosy, either taken inwardly, drinking whey after it, or the green herb outwardly applied; it hindereth conception in women, being either burned or strewed in the chamber; it driveth away venomous serpents. It takes away black and blue marks in the face, and maketh black scars become well-coloured, if the green herb be boiled in wine, and laid to the place, or the place washed therewith: being applied to the huckle-bone, by continuance of time it spendeth the humours which cause the pains of the sciatica; the juice, dropped into the ears, killeth the worms in them; the leaves, boiled in wine, and drunk, provoke sweat, and open obstructions of the liver and spleen. It helpeth them that have a tertian ague, the body being first

purged, by taking away the cold fits; the decoction hereof, with some sugar put thereto, is very profitable for those that are troubled with the overflowings of the gall, and also for those who have an old cough, and that are scarcely able to breathe by shortness of their wind; that have any cold distemper in their bowels, and are troubled with the hardness of the spleen, for all which purposes both the powder called diacaluminthes, and the compound syrup of calamint, (which are to be had at the apothecaries,) are most effectual. Let not women be too busy with it, for it works very violently upon the female subject.

### C A M O M I L E. ANTHEMIS.

IT is so well known every where, that it is but lost time and labour to describe it. The virtues thereof are as follow:

A decoction made of camomile, and drunk, taketh away all pains and stitches in the sides; the flowers of camomile, beaten and made up into balls with oil, drive away all sorts of agues, if the party grieved be anointed with that oil, taken from the flowers, from the crown of the head to the sole of the foot, and afterwards laid to sweat in his bed; this is Nichesfor an Egyptian's medicine. It is profitable for all sorts of agues that come either from phlegm or melancholy, or from an inflammation of the bowels, being applied when the humours causing them shall be concocted; and there is nothing more profitable to the sides and region of the liver and spleen than this; the bathing with a decoction of camomile taketh away weariness, easeth pains to what part of the body ever it be applied; it comforteth the sinews that are overstrained: mollifieth all swellings; it moderately comforteth all parts that have need of warmth; digesteth and dissolveth whatsoever hath need thereof by a wonderful and speedy property. It easeth all the pains of the cholic and stone, and all pains and torments of the belly, and gently provoketh urine: the flowers, boiled in posset-drink, provoke sweat, and help to expel colds, aches, and pains wherefover, and are an excellent help to bring down women's courses; a syrup, made of the juice of camomile with the flowers and white wine, is a remedy against the jaundice and dropfy; the flowers boiled in lye, are good to wash the head, and comfort both it and the brain; the oil, made of the flowers of camomile, is much used against all hard swellings, pains or aches, shrinking of the sinews, or cramps or pains in the joints, or any other part of the body; being used in clysters, it helpeth to dissolve wind and pains in the belly; anointed also, it helpeth stiches and pains in the sides.

Nichesfor faith, the Egyptians dedicated it to the Sun because it cured agues; and they were like enough to do it, for they were the most superstitious people in their religion

religion I ever read of. Bacchinius, Pena, and Lobel, commend the syrup made of the juice of it and sugar, taken inwardly, to be excellent for the spleen. Also this is certain, that it most wonderfully breaks the stone; some take it in syrup or decoction, others inject the juice of it into the bladder with a syringe: my opinion is, that the salt of it, taken half a dram in the morning in a little white or rhenish wine, is better than either; that it is excellent for the stone, appears in this which I have seen tried, viz. That a stone that hath been taken out of the body of a man, being wrapped in camomile, will in short time dissolve.

#### W A T E R - C A L T R O P S. TRAPA.

THEY are called also, *tribulus aquaticus*, *tribulus lacustris*, *tribulus marinus*, caltrops, faligot, water-nuts, and water-chesnuts.

DESCRIPTION. As for the greater sort, or water-caltrop, it is but very rarely found here: two other sorts there are, which I shall here describe.—The first hath a long, creeping, and jointed, root, sending forth tufts at each joint, from which joints arise long, flat, slender, knotted, stalks, even to the top of the water, divided towards the top into many branches, each carrying two leaves on both sides, being about two inches long and half an inch broad, thin and almost transparent; they look as though they were torn; the flowers are long, thick, and whitish, set together almost like a bunch of grapes; which being gone, there succeed, for the most part, four sharp-pointed grains all together, containing a small white kernel in them.

The second differs not much from this, except that it delights in more clear water; its stalks are not flat, but round; its leaves are not so long, but more pointed. As for the place, we need not determine, for their name shews they grow in the water.

GOVERNMENT AND VIRTUES. It is under the dominion of the Moon; and, being made into a poultice, is excellent good for hot inflammations and swellings, cankers, sore throats and mouths, being washed with the decoction; it cleanseth and strengtheneth the neck and throat much, and helpeth those swellings, which, when people have, they say the almonds of the ears are fallen down. It is excellent good for the stone and gravel, especially the nuts, being dried; they also resist poison, and the bitings of venomous beasts.

#### W I L D C A M P I O N S. AGROSTEMA.

DESCRIPTION. THE wild white campion hath many long and somewhat broad dark-green leaves lying upon the ground, with divers roots therein, somewhat like plantain, but rather hairy, broader, and not so long; the hairy stalks rise up in the middle of them three or four feet high, and sometimes more, with divers great

white joints at several places thereon, and two such-like leaves thereat up to the top, fending forth branches at several joints also, all which bear, on several foot-stalks, white flowers at the tops of them, consisting of five broad-pointed leaves, every one cut in on the end unto the middle, making them seem to be two a-piece, smelling somewhat sweet, and each of them standing in large, green, striped, hairy, husks, large and round below next to the stalk; the seed is small and greyish in the hard heads that come up afterwards; the root is white, long, and spreading.

The red wild campion groweth in the same manner as the white, but its leaves are not so plainly ribbed, somewhat shorter, rounder, and more woolly in handling: the flowers are of the same size and form, but some are of a pale and others of a bright red colour, cut in at the ends more finely, which makes the leaves seem more in number than the other: the seed and the roots are alike, the roots of both sorts abiding many years.

There are forty-five sorts of campions more: those of them which are of physical uses have the like virtues with these above described, which are the two chief kinds.

PLACE. They grow commonly throughout this kingdom in fields, and by hedge-sides and ditches.

TIME. They flower in summer, some earlier than others, and some abiding longer than others.

GOVERNMENT AND VIRTUES. They belong to Saturn; and it is found by experience, that the decoction of the herb, either of the white or red, being drunk, doth stay inward bleedings, and applied outwardly it doth the like; also, being drunk, it helpeth to expel urine, being stopped, and gravel or stone in the reins or kidneys; two drams of the seed, drunk in wine, will purge the belly of choleric humours, and help those that are stung by scorpions, or other venomous beasts, and may be as effectual for the plague: it is of very good use in old sores, ulcers, cankers, fistulas, and the like, to cleanse and heal them, by consuming the moist humours falling into them, and correcting the putrefaction of humours offending them.

### CARDUUS BENEDICTUS. CNICUS.

IT is called *carduus benedictus*, or blessed thistle, or holy thistle; which name was doubtless given to it on account of its excellent qualities.

I shall spare a labour in writing a description of this, since almost every one may describe it from his own knowledge.

PLACE. It groweth plentifully in gardens.

TIME. It flowers in August, and seeds soon after.

GOVERNMENT AND VIRTUES. It is an herb of Mars, and under the sign Aries. Now, in treating on this herb, I shall give you a rational conception of all the

rest ; and, if you please to view them throughout the book, you shall to your content find them true. It helps swimmings and giddiness of the head, or the disease called vertigo, because Aries is in the house of Mars. It is an excellent remedy against the yellow jaundice, and other infirmities of the gall, because Mars governs choler. It strengthens the attractive faculty in man, and clarifies the blood, because it is ruled by Mars. The continual drinking the decoction of it helps red faces; tetter, and ring-worms, because Mars causes them. It helps plague-fores, boils, the itch, and bitings of mad dogs and venomous beasts ; all which infirmities are under Mars. Thus you see what it doth by sympathy.

By antipathy to other planets, it cures the venereal disease ; this by antipathy to Venus, who governs it. It strengthens the memory, and cures deafness, by antipathy to Saturn, who hath his fall in Aries, which rules the head. It cures quartan agues, and other diseases of melancholy and adust choler, by sympathy to Saturn, Mars being exalted in Capricorn ; also it provoketh urine, the stopping of which is usually caused by Mars or the Moon. It is excellent for the head and the parts thereof ; this herb being eaten, or the powder or juice drunk, keepeth a person from the head-ach and megrim, and also driveth it away. Being taken in meat or drink, it is good against dizziness and swimming of the head. It comforteth the brain, sharpeneth the wit, and strengtheneth the memory : it is a singular remedy against deafness, for it amendeth the thickness of the hearing, and provokes sleep. The juice of it laid to the eyes quickeneth the sight ; also, the water in which the powder or herb dried is steeped, hath the same effect if the eyes be washed therewith ; the herb eaten is good for the same purpose. The water or juice dropped into the eyes, cureth the redness, bloodshot, and itching, of them. Some write that it strengthens the teeth, they being washed and rubbed with a cloth dipped in the water or juice thereof. The powder stauncheth the blood that floweth out of the nose, being applied to the place. It comforteth the stomach ; the broth of the herb, otherwise called the decoction, drunk in wine, is good for an evil stomach ; it helpeth the weak stomach, and causeth appetite to meat ; also the wine wherein it hath been boiled, doth cleanse and mundify the infected stomach. The powder thereof, eaten with honey, or drunk in wine, doth ripen and digest cold phlegm, purgeth and bringeth up that which is in the breast, scouring the same of gross humours, and causeth to breathe more easily. The herb, chewed in mouth, helpeth the stench of the breath. It helpeth the heart ; the powder, being taken before a man is infected, preserveth him from pestilence ; and a dram of it, or a walnut-shell full, taken immediately after he feeleth himself infected, expelleth the venom of the pestilent infection from the heart, so that, if a man sweat afterwards, he may be preserved : the same effect hath the herb boiled in wine, or in the urine of a healthy man-child, and drunk ; I mean the decoction or liquor from which the herb is strained, after it hath been boiled

boiled therin; the same preparation is also good for the dropsy, the falling-sickness, and to break aposthumes. The leaves, powder, juice, or water, of the herb, being drunk, and the patient well covered with clothes, sweating three hours, expelleth all poisons that have been taken in at the mouth, and other corruption or infection that may hurt and annoy the heart. It helpeth the liver, lungs, and other parts of the body; the herb boiled in wine, and drunk hot about a quarter of an hour before the fit, and the patient afterwards well covered in bed, driveth away the ague. The powder and water of this herb, drunk with wine, have the same effect. The juice, drunk with wine, is good against shortness of breath, and the diseases of the lungs: it strengtheneth the members, and is good against the aches of the body. The powder, eaten or drunk, is good against stiches in the side: it is also good for those that begin to have the consumption, called the phthisic: the herb, eaten, doth strengthen trembling and paralytic members: the powder, ministered in a clyster, helpeth the cholic, and other diseases of the guts: and the water drunk hath the same effect. The juice taken with wine, or the herb boiled in wine and drunk hot, breaketh the stone, and driveth out gravel; being sodden in water, and the patient sitting over it, so that the hot vapour may come unto the diseased place, it helpeth against the same infirmity; after the like manner being used, it is good against the green sickness; also, it easeth the griping pains of the belly, openeth the stoppings of the members, and pierceth and causeth urine. The leaves boiled in wine, and drunk, as aforesaid, provoke sweats, consume evil blood, and engender good; also, the wine or water, in which this herb has boiled, being drunk, consumeth evil humours, and preserveth good. It is excellent for one that is bruised with a fall or otherwise. The leaves, juice, broth, powder, and water, of the herb, are very good to heal the canker, and old, rotten, festered, sores: the leaves bruised or pounded, and laid to, are good against burnings, hot swellings, carbuncles, and sores that are hard to be cured, especially for those of the pestilence: they are likewise good to heal the bitings of venomous worms and serpents, or creeping beasts. Finally, the down coming off the flowers thereof, when the seed is ripe, doth heal cuts and new wounds without pain.\*

### C A R R O T S. DAUCUS.

GARDEN carrots are so well known, that they need no description; but, because they are of less physical use than the wild kind, (as indeed, almost in all herbs, the wild are most effectual in physic, as being more powerful in their operations than the garden kind,) I shall therefore briefly describe the wild carrot.

#### DESCRIPTION.

\* Thus much of *carduus benedictus*, gathered out of the Herbals of divers learned men, which although it may be sufficient, yet I have thought good here to set down that which two studious

DESCRIPTION. It groweth in a manner altogether like the tamé, but that the leaves and stalks are somewhat whiter and rougher; the stalks bear large tufts of white flowers, with a deep purple spot in the middle, which are contracted together when

and skilful physicians, Mathiolus and Fuschius, have written hereof in Latin; whose words, as perhaps they may bring some credit to that which is already written, so in them something more may be learned, or at the least something is uttered for the better understanding of that aforesaid. Their words are in English as followeth: *Carduus benedictus* is a plant of great virtue, especially against the pestilence, and also against deadly poisons, as well taken inwardly as outwardly applied to the stingings and bitings of venomous beasts; they also are healed with this herb that are troubled with a quartan or other agues, that come by a cold, and that by drinking of the decoction or distilled water, or a dram of the powder: in like manner being drunk, it helpeth infants that are troubled with the falling sickness. The decoction taken in wine doth mitigate the pains of the guts and reins, and other griefs of the belly; it provoketh sweat, it killeth worms, and is good against other diseases of the womb: the herb itself as well green as dried, both drunk and laid outwardly to the grief, doth heal ulcers; on such extraordinary occasions it is mingled with the drink made of *guaiacum*, wine, and water, for the French disease. Learned writers affirm that it taketh away the stoppings of the inward bowels; it provoketh urine, breaketh the stone, and helpeth those that are stung of venomous beasts. They say also that those cannot be infected who take it in their meat and drink, before they come into the evil air, and that it helpeth them much that are already infected; moreover, most agree, that it is a remedy against the bitings of serpents. Finally, to conclude, late writers say, that it cureth the pains of the head, taketh away giddiness, recovereth the memory, being taken in meat or drink. Also it helpeth festering sores, especially of the paps and teats, if the powder thereof be laid on them. By this we may in part understand, with how great virtue God hath indued, and I may say, blessed, this herb. To sum up all, it helpeth inwardly and outwardly; it strengthens almost all the principal members of the body, as the brain, the heart, the stomach, the liver, the lungs, and kidneys. It is also a preservative against all diseases, for it provoketh sweat, by which the body is purged of much corruption which breedeth diseases. It expelleth the venom of infection, it consumes ill blood, and all naughty humours, whereof diseases are engendered. Therefore, giving God thanks for his goodness which hath given this herb, and all other things, for the benefit of our health: it will in the next place be convenient to consider how to make use of it in the application.

It is to be observed, that we may use this herb, and enjoy the virtues thereof, four ways: First, in the green leaf. Secendly, in the powder. Thirdly, in the juice. And fourthly, in the distillation. The green leaf may be taken with bread and butter, as we used to take sage and parsley in a morning for breakfast: and, if it be too bitter, it may be taken with honey instead of butter. It may be taken in pottage boiled among other herbs; or, being shred small, it may be drunk with ale, beer, or wine. It is sometimes given in beer with *aqua composita*, and that without harm, when the stomach of the patient is weak, and he not troubled with any hot disease. The juice of it is outwardly applied; the leaf, powder, and water, of it, are received into the mouth. It may be

when the seed begins to ripen; so that the middle part being hollow and low, and the outward stalks rising high, maketh the whole umbel to shew like a bird's nest: the root is very small, long, and hard, and quite unfit for meat, being somewhat sharp and strong.

**PLACE.** The wild kind groweth in divers parts of this land, plentifully by the field sides, and in untilled places.

**TIME.** They flower and seed in the end of summer.

**GOVERNMENT AND VIRTUES.** Wild carrots belong to Mercury, and therefore expel wind, and remove fitches in the sides, provoke urine and women's courses, and help to expel and break the stone; the seed also of the same worketh the like effect, and is good for the dropsy, and those whose bellies are swollen with wind; it helpeth the cholic, the stone in the kidneys, and the rising of the mother, being taken in wine; boiled in wine and taken, it helpeth conception: the leaves, being applied with honey to running sores or ulcers, do cleanse them. I

taken in pottage also in the green leaf, or with wine, which if it be burned and drunk hot, it is the better. If you please, you may boil it with wine, and honey or sugar to make it sweet, and then drink it very warm. The powder may be taken with honey upon the point of a knife, or with bread and honey if you prefer it; or else it may be drunk with ale, beer, or wine. The distilled water may be drunk by itself alone, or else with white wine before meat, especially if the stomach be weak and cold. The liquor or broth in which this herb is boiled may be made thus: Take a quart of running water, sceth it and scum it, then put it into a good handful of the herb, and let it boil until the better part be consumed; then drink it with wine, or if you think fit with honey or sugar, to make it the more palatable. Or you may take a portion thus: Take a good handful of the leaves, with a handful of raisins of the sun, washed and stoned, and some sugar-candy and liquorice sliced small; boil them all together in a quart of water, ale, or wine: if it be bitter, it may be made sweet as aforesaid. It is also to be observed, that the powder and water of the herb are most to be regarded, and especially the water: for they may be long preserved, so that you may have them always in readines for use, when neither the green leaf nor juice can be had. The water, which only is free from blitternes, may be drunk by itself alone, for the stomach and taste will bear it, being equally as palatable as rose-water. If the seed be sown as soon as it is ripe, you may have the herb both winter and summer, from the time that it beginneth to grow until the seed grow ripe again. Therefore I counsel all those who have gardens, to nourish it, that they may have it always for their own use, and the use of their neighbours that stand in need of it. But perhaps some may ask a question of the time and quantity, which things are to be considered in taking of medicines. As touching the time, if it be taken for a preservative, it is good to take it in the morning, or in the evening before going to bed, because that is a convenient time to sweat for one that feeleth himself not greatly diseased. But, if a man take it to expel any ill humours, it is good to take it whenever the grief is felt in the body, and immediately to go to bed and sweat.

suppose

suppose the seed of them performs this better than the root ; and, though Galen commendeth garden-carrots highly to break wind, yet experience teacheth that they breed it first; and we may thank nature for expelling it, not they. The seeds of them expel wind, and so mend what the root marreth.

### C A R R A W A Y. CARUM.

**DESCRIPTION.** IT beareth divers stalks of fine cut leaves lying upon the ground, somewhat like the leaves of carrots, but not bushing so thick, of a little quick taste, from among which riseth up a square stalk not so high as the carrot, at whose joints are set the like leaves, but smaller and finer, and at the top small open tufts or umbels of white flowers, which turn into small blackish seed, smaller than aniseed, and of a quicker and hotter taste : the root is whitish, small and long, somewhat like unto a parsnip, but with more wrinkled bark; and much les, of a little hot and quick taste, and stronger than the parsnip ; it abideth after seed-time.

**PLACE.** It is usually sown with us in gardens.

**TIME.** They flower in June and July, and seed quickly after.

**GOVERNMENT AND VIRTUES.** This is also a mercurial plant. Carraway-seed hath a moderate sharp quality, whereby it expelleth wind, and provoketh urine, which also the herb doth : the root is better food than the parsnip, and is pleasant and comfortable to the stomach, helping digestion : the seed is a remedy for all the cold griefs of the head and stomach, the bowels or mother, as also the wind in them, and helpeth to sharpen the eye-sight. The powder of the seed, put into a poultice, taketh away black and blue spots of blows or bruises ; the herb itself, or with some of the seed, bruised and fried, laid hot in a bag or double cloth to the lower parts of the belly, easeth the pains of the wind-cholic : the roots of caraways, eaten as men eat parsnips, strengthen the stomach of aged people exceedingly, and they need not make a whole meal of them neither ; it is fit to be planted in every man's garden. Carraway-comfits, once only dipped in sugar, and half a spoonful of them eaten in a morning fasting, and as many after each meal, is a most admirable remedy for such as are troubled with wind.

### C E I A N D I N E. CHELIDONIUM.

**DESCRIPTION.** THIS hath divers tender, round, whitish-green, stalks, with greater joints than ordinary in other herbs, as it were knees, very brittle and easy to break, from whence grow branches, with large, tender, long, leaves, divided into many parts, each of them cut in on the edges, set at the joints on both sides of

the

the branches, of a dark bluish green colour on the upper side, like columbines, and of a more pale bluish green underneath, full of yellow sap; when any part is broken, of a bitter taste, and strong scent; at the tops of the branches, which are much divided, grow gold-yellow flowers of four leaves each, after which come small long pods, with blackish seed therein. Its root is somewhat great at the head, shooting forth divers long roots, and small strings, reddish on the outside, and yellow within, and is full of a yellow sap.

**PLACE.** It groweth in many places, by old walls, by the hedges and way-sides in un-tilled places; and being once planted in a garden, especially in a shady place, it will remain there.

**TIME.** They flower all the summer long, and the seed ripeneth in the mean time.

**GOVERNMENT AND VIRTUES.** This is an herb of the Sun, and under the celestial Lion, and is one of the best cures for the eyes that is. All that know any thing of Astrology, know, as well as I can tell them, that the eyes are subje<sup>c</sup>t to the luminaries; let it then be gathered when the Sun is in Leo, and the Moon in Aries applying to his trine. Let Leo arise, then you may make it into an oil or ointment, which you please, to anoint sore eyes with; I can prove it both from my own experience, and the experience of those whom I have taught it, that the most desperate sore eyes have been cured by this medicine only; then, I pray, is not this better than endangering the eyes by the art of the needle? for, if this do not absolutely take away the film, it will so facilitate the work that it may be done without danger. The herb or root being boiled in white wine with a few aniseeds therein, and drunk, openeth obstructions of the liver and gall, helpeth the yellow jaundice, and often using it helps the dropsy, the itch, and those who have old sores in their legs, or other parts of their body. The juice thereof taken fasting, is held to be of singular good use against the pestilence; the distilled water with a little sugar, and a little good treacle mixed therewith, (the party upon taking it being laid down to sweat a little,) hath the same effect: the juice dropped into the eyes cleanseth them from films and cloudiness, which darken the sight, but it is best to allay the sharpness of the juice with a little breast-milk; it is good in old filthy, corroding, creeping, ulcers wherefover, to stay the malignity of fretting and running, and to cause them to heal more speedily; the juice often applied to tetterers, ring-worms, or other such-like spreading cankers, will quickly heal them; and, rubbed often upon warts, will take them away. The herb with the roots bruised, and bathed with oil of camomile, and applied to the navel, taketh away the griping pains in the belly and bowels, and all the pains of the mother, and, applied to women's breasts, stayeth the over-much flowing of their courses; the juice or decoction

of the herb, gargled between the teeth that ach, easeth the pain, and the powder of the dried root laid upon an aching, hollow, or loose, tooth, will cause it to fall out. The juice mixed with some powder of brimstone, is not only good against the itch, but taketh away all discolouring of the skin whatsoever, and, if it chance that in a tender body it causeth any itching or inflammation, it is helped.

Another bad method have physicians in administering relief to the eye, which is worse than the needle: that is, to eat away the film by corroding or gnawing medicines: this I absolutely protest against, 1. Because the tunicles of the eyes are very thin, and therefore soon eaten asunder. 2. The *callus* or film that they would eat away is seldom of an equal thickness in every place, and by that means the tunicle may be eaten asunder in one place before the film be consumed in the other, and so prove a readier way to extinguish the sight than to restore it. It is called *chelidonium* from the Greek word  $\chi\epsilon\lambda\eta\delta\omega\pi$ , which signifies a swallow, because they say, that, if you prick out the eyes of young swallows when they are in the nest, the old ones will recover their eyes again with this herb. But, as it can answer no good purpose to torture helpless unoffending animals, I entreat my readers to try no such foolish, cruel, wicked, experiments.

Also I have read, and it seems to me somewhat probable, that the herb being gathered, as I showed before, and the elements separated from it by the art of the alchymist, and, after they are drawn apart, rectified, the earthly quality still in rectifying them added to the *terra damnata*, as alchymists call it, or, as some philosophers term it, *terra sacratissima*; the elements so rectified are sufficient for the cure of all diseases, the humour offending being known, and the contrary element given. It is an experiment worth the trying, and can do no harm.

#### S M A L L E R C E L A N D I N E. RANUNCULUS.

IT is usually known by the name of pilewort, and fogwort, and I wonder much on what account the name of the celandine was given it, which resembles it neither in nature or form. It acquired the name of *pilewort* from its virtues; and it being no matter where I set it down, so I do not quite omit it, I shall proceed to the description.

**DESCRIPTION.** This celandine, or pilewort, doth spread many round pale-green leaves, set on weak and trailing branches, which lie upon the ground, and are flat, smooth, and somewhat shining, and in some places, though seldom, marked with black spots, each standing on a long footstalk, among which rise small, yellow flowers, consisting of nine or ten small narrow leaves, upon slender footstalks, very like crowfoot, whereunto the seed is not unlike, being many small

ones set together upon a head: the root is composed of many small kernels like grains of corn, some twice as long as others; of a whitish colour, with some fibres at the end of them.

PLACE. It groweth for the most part in the moist corners of fields, and places near water-sides; yet will abide in drier grounds, if they are but a little shadowed.

TIME. It flowereth about March or April, and is quite gone in May, so that it cannot be found until it springs again.

GOVERNMENT AND VIRTUES. It is under the deminion of Mars; and behold here another verification of that learning of the ancients, viz. that the virtue of an herb may be known by its signature, as plainly appears in this; for, if you dig up the root of it, you shall see the perfect image of that disease which is commonly called the piles. It is certain from good experience, that the decoction of the leaves and roots doth wonderfully help the piles and haemorrhoids, as also kernels by the ears and throat, called the king's-evil, or any other hard wens or tumours. Pilewort made into an oil, ointment, or plaster, readily cures both the piles, haemorrhoids, and the king's-evil; the very herb borne about one's body next to the skin, helps in such diseases, though it does not touch the place grieved. Let poor people make much of this for these uses, for with this I cured my own daughter of the king's-evil, broke the sore, drew out a quarter of a pint of corrupt matter, and in one week made a complete cure without a scar.

### S M A L L E R C E N T A U R Y. GENTIANA.

DESCRIPTION. THIS groweth up most usually with but one round and somewhat crested stalk, about a foot high, or better, branching forth at the top into many sprigs, and some also from the joints of the stalks below; the flowers, that stand at the tops, as it were in an umbel or tuft; are of a pale red, tending to a carnation colour, consisting of five, sometimes six, small leaves, very like those of St. John's wort, opening themselves in the day-time, and closing at night; after which cometh the seed in little short husks, in form like wheat-corns: the leaves are small, and somewhat round: the root is small and hard, perishing every year. The whole plant is of an exceeding bitter taste.

There is another sort of centaury in all things like the former, save only that it beareth white flowers.

PLACE. They grow generally in fields, pastures, and woods; but that with the white flowers not so frequently as the other.

TIME. They flower in July, or thereabouts, and seed within a month after.

GOVERNMENT AND VIRTUES. They are all under the dominion of the Sun,

as appears in that their flowers open and shut as the Sun either sheweth or hideth his face. This herb, boiled and drunk, purgeth choleric and gross humours, and helpeth the sciatica; it openeth obstructions of the liver, gall, and spleen, helping the jaundice, and easing the pains in the sides, and hardness of the spleen, if used outwardly; it is given with good effect in agues; it helpeth those that have the dropsy, or the green-sickness, being much used in powder by the Italians for that purpose: and it killeth the worms in the belly, as found by experience. The decoction thereof, viz. the tops of the stalks with the leaves and flowers, is good against the cholic, and to bring down women's courses; it helpeth to expel the dead birth, and easeth pains of the mother, and is very effectual in all old pains of the joints, as the gout, cramps, or convulsions. A dram of the powder thereof taken in wine, is a wonderful good help against the biting and poison of an adder; the juice of the herb, with a little honey put to it, is good to clear the eyes from dimness, mists, and clouds, that offend and hinder the sight. It is very good both for green and fresh wounds, as also for old ulcers and sores, to close up the one and cleanse the other, and to perfectly cure them both, although they are hollow or fistulous; especially if the green herb be bruised, and laid thereon: the decoction thereof, dropped into the ears, frees them from worms, cleanseth the foul ulcers and spreading scabs of the head, and taketh away all freckles, spots, and marks, of the skin, being washed therewith; the herb is so safe, you cannot fail in the using of it. Take it inwardly only for inward diseases, and apply it outwardly for outward complaints: it is very wholesome, but not pleasant to the taste.

There is besides these another small centaury, which beareth a yellow flower; in all other respects it is like the former, save that the leaves are bigger, and of a darker green, and the stalk passeth through the midst of them, as it does in the herb thoroughwax. They are all of them, as I said before, under the dominion of the Sun; yet this, if you observe it, you shall find an excellent truth:—In diseases of the blood, use the red centaury; if of choleric, use the yellow; but, if of phlegm or water, you will find the white best.

#### C H E R R Y - T R E E. PRUNUS.

I SUPPOSE there are few but know this tree, if only for its fruit's sake, and therefore I shall decline writing a description.

PLACE. For the place of its growth, it is afforded room in every orchard.

GOVERNMENT AND VIRTUES. It is a tree of Venus. Cherries, as they are of different tastes, so they are of divers qualities; the sweet pass through the stomach and belly more speedily, but are of little nourishment: the tart or sour are more pleasing

pleasing to a hot stomach, procuring appetite to meat, and help to cut tough phlegm and gross humours; but, when dried, they are more binding than when fresh, being cooling in hot diseases, and welcome to the stomach; they also provoke urine. The gum of the cherry-tree, dissolved in wine, is good for a cough, and hoarseness of the throat; it mendeth the colour in the face, sharpeneth the eye-sight, provoketh the appetite, and helpeth to break and expel the stone. Black cherries bruised with the stones, and distilled, the water thereof is much used to break the stone, expel gravel, and break wind.

### WINTER CHERRIES. PHYSALIS.

**DESCRIPTION.** THE winter cherry hath a running or creeping root in the ground, generally of the size of one's little finger, shooting forth at several joints, in several places, whereby it quickly spreadeth over a great compass of ground; the stalk riseth not above a yard high, whereon are set many broad and long green leaves, somewhat like nightshade, but larger; at the joints whereof come forth whitish flowers made of five leaves each, which afterwards turn into green berries, enclosed with a thin skin, which change to reddish when they grow ripe, the berry likewise being reddish, and as large as a cherry, wherein are contained many flat yellowish seeds, lying within the pulp, which, being gathered and strung up, are kept all the year, to be used upon occasion.

**PLACE.** They do not grow naturally in this land, but are cherished in gardens for their virtues.

**TIME.** They flower not until the middle or latter end of July, and the fruit is ripe about the end of August, or beginning of September.

**GOVERNMENT AND VIRTUES.** This is also a plant of Venus. They are of great use in physic; the leaves, being cooling, may be used in inflammations; but are not opening as the berries and fruit are, which, by drawing down the urine, provoke it to be voided plentifully when it is stopped, or grown hot, sharp, or painful in the passage; it is good also to expel the stone and gravel out of the reins, kidneys, and bladder, helping to dissolve the stone, and voiding it by grit or gravel sent forth in the urine; it also helpeth much to cleanse inward imposthumes or ulcers in the reins or bladder, or in those that void a bloody or foul urine: the distilled water of the fruit, or the leaves together with them, or the berries green or dry, distilled with a little milk, and drunk morning and evening with a little sugar, is effectual to all the purposes before specified, and especially against the heat and sharpness of the urine. I shall only mention one way, amongst many others, which might be used for ordering the berries to be helpful for the urine and stone, which is thus:

Take

Take three or four good handfuls of the berries, either green or fresh, or dried, and, having bruised them, put them into so many gallons of beer or ale when it is newly tunned up; this drink, taken daily, hath been found to do much good to many, both to ease the pains, expel urine and the stone, and to cause the stone not to ingender. The decoction of the berries in wine and water is the most usual way, but the powder of them taken in drink is the most effectual.

C H E R V I L. SCANDIX. CHÆROPHYLLUM.

IT is called cerefolium, mirrhis and mirtha, chervil, sweet chervil, and sweet cicely.

DESCRIPTION. The garden chervil (Scandix) doth at first resemble parsley; but, after it is more grown, the leaves are much cut and jagged, resembling hemlock, being a little hairy, and of a whitish-green colour, sometimes turning reddish in the summer, as do the stalks also; it riseth a little more than half a foot high, bearing white flowers in spiked tufts, which turn into long and round seeds, pointed at the ends, and blackish when they are ripe, of a sweet taste, but no smell, though the herb itself smelleth reasonably well: the root is small and long, and perisheth every year, and must be sown in the spring for seed, and after July for autumn salad.

The wild chervil (Chærophyllum) growtheth two or three feet high, with yellow stalks and joints set with broader and more hairy leaves, divided into sundry parts, nicked about the edges, and of a dark-green colour, which likewise grow reddish with the stalks; at the tops whereof stand small white tufts of flowers, and afterwards smaller and longer seed: the root is white, hard, and endureth long. This hath little or no scent.

PLACE. The first is sown in gardens for a salad-herb; the second growtheth wild in the meadows of this land, and by hedge-sides, and on heaths.

TIME. They flower and seed early, and thereupon are sown again at the end of the summer.

GOVERNMENT AND VIRTUES. The garden chervil, being eaten, doth moderately warm the stomach, and is a certain remedy to dissolve congealed or clotted blood in the body, or that which is clotted by bruises, falls, &c. The juice or distilled water thereof being drunk, and the bruised leaves laid to the place; being taken either in meat or drink, it is held good to provoke urine, and expel the stone in the kidneys, to bring down women's courses, and to help the pleurify and prickings of the sides. The wild chervil, bruised and applied, dissolveth swellings in any part of the body, and taketh away spots and marks of congealed blood by bruises or blows in a short time.

## SWEET CHERVIL. SCANDIX.

CALLED by some sweet cicely.

DESCRIPTION. It groweth very much like the greater hemlock, having large spread leaves, cut into divers parts, but of a fresher green colour than hemlock, tasting as sweet as aniseed; the stalk riseth up a yard high, or more, being crested or hollow, having the leaves at the joints, but les, and at the tops of the branched stalks umbels or tufts of white flowers; after which come large and long crested black shining seed, pointed at both ends, tasting quick, yet sweet and pleasant: the root is great and white, growing deep in the ground, and spreading sundry long branches therein, in taste and smell stronger than the leaves or seed, and continuing many years.

PLACE. It groweth in gardens.

GOVERNMENT AND VIRTUES. These are all three of them of the nature of Jupiter, and under his dominion. The whole plant, besides its pleasantness in salads, hath also its physical virtues; the root boiled and eaten with oil and vinegar, or without oil, doth much please and warm an old and cold stomach, oppressed with wind or phlegm, or those that have the phthisic or consumption of the lungs. The same, drunk with wine, is a preservative from the plague; it provoketh women's courses, and expelleth the after-birth, procureth an appetite to meat, and expelleth wind; the juice is good to heal ulcers of the head and face; the candied roots hereof are held as effectual as angelica to preserve from infection in the time of plague, and to warm and comfort a cold weak stomach. It is so harmless, that you cannot make use of it amiss.

## CHESTNUT-TREE. FAGUS.

TO describe a tree so commonly known, were as needless as to tell a man he has a mouth; therefore take the government and virtues of it thus:

The tree is absolutely under the dominion of Jupiter, and therefore the fruit must needs breed good blood, and yield commendable nourishment to the body; yet, if eaten overmuch, they make the blood thick, procure the head-ach, and bind the body; the inner skin that covereth the nut, is of so binding a quality, that a scruple of it being taken by a man, or ten grains by a child, soon stops any flux whatsoever: the whole nut being dried and beaten into powder, and a dram taken at a time, is a good remedy to stop the terms in women. If you dry chesnuts, and beat the kernels into powder, both the barks being taken away, and make it into an electuary with honey, you have an admirable remedy for the cough and spitting blood.

## EARTH CHESNUTS. ARACHIS.

THEY are called also earth-nuts, ground-nuts, cipper-nuts, and in Sussex they are called pig-nuts. A description of them were needless, for every child knows them.

**GOVERNMENT AND VIRTUES.** They are something hot and dry in quality; under the dominion of Venus; they provoke lust exceedingly, and stir up to those sports she is mistress of; the seed is excellent good to provoke urine, and so also is the root, but doth not perform it so forcibly as the seed. The root being dried and beaten into powder, and the powder made into an electuary, is as singular a remedy for spitting and pissing blood as the former chesnuts are for coughs.

## CHICKWEED. ALSINE.

It is generally known to most people; I shall not therefore trouble you with the description thereof, nor myself with setting forth the several kinds, since there are but two or three worth notice for their usefulness.

**PLACE.** These are usually found in moist and watery places, by wood-sides, and elsewhere.

**TIME.** They flower about June, and their seed is ripe in July.

**GOVERNMENT AND VIRTUES.** It is a fine, fast, pleasing, herb, under the dominion of the Moon. It is found to be as effectual as purslain to all the purposes whereunto it serveth, except for meat only. The herb bruised, or the juice applied with cloths or sponges dipped therein to the region of the liver, and as they dry to have fresh applied, doth wonderfully temper the heat of the liver, and is effectual for all imposthumes and swellings whatsoever; for all redness in the face, wheals, pushes, itch, and scabs, the juice being either simply used, or boiled in hog's grease; the same helpeth cramps, convulsions, and palsies: the juice or distilled water is of good use for all heat and redness in the eyes, to drop some of it into them; as also into the ears to ease the pains in them, and is of good effect to ease the pains and heat and sharpness of blood in the piles, and all pains of the body in general that proceed from heat; it is used also in hot and virulent ulcers and sores in the privy parts of men and women, or on the legs, or elsewhere. The leaves boiled with marshmallows, and made into a poultice with fenugreek and linseed, applied to swellings or imposthumes, ripeneth and breaketh them, or assuageth the swellings and easeth the pains; it helpeth the sinews when they are shrunk by cramps or otherwise, and extends and makes them pliable again, by using the following method: viz. Boil a handful of chickweed, and a handful of dried red-rose leaves,

but not distilled, in a quart of muscadine, until a fourth part be consumed; then put to them a pint of oil of trotters, or sheep's feet; let them boil a good while, still stirring them well, which being strained, anoint the grieved part therewith warm against the fire, rubbing it well with your hand, and bind also some of the herb, if you choose, to the place, and with God's blessing it will help in three times dressing.

### C H I C H P E A S E. CICER.

IT is also called by some cicers.

DESCRIPTION. The garden sorts, whither red, black, or white, bring forth stalks a yard long, whereon grow many small and almost-round leaves, dented about the edges, set on both sides of a middle rib; at the joints come forth one or two flowers upon sharp footstalks, pease-fashion, either whitish or purplish red, lighter or deeper, according as the pease that follow will be, that are contained in small, thick and short, pods, wherein lie one or two pease, though usually more, a little pointed at the lower end, and almost round at the head, yet a little cornered or sharp. The root is small, and perisheth yearly.

PLACE AND TIME. They are sown in gardens, or in fields, as pease, being sown later than pease, and gathered at the sametime with them, or presently after.

GOVERNMENT AND VIRTUES. They are both under the dominion of Venus. They are no less windy than beans, but nourish more; they provoke urine, and are thought to increase sperm; they have a cleansing faculty, whereby they break the stone in the kidneys. To drink the cream of them, being boiled in water, is the best way. It moveth the belly downward, provoketh women's courses, and urine, and increaseth both milk and seed. One ounce of cicers, two ounces of French barley, and a small handful of marsh-mallow roots, clean-washed and cut, being boiled in the broth of a chicken, and four ounces taken in the morning, fasting two hours after, is a good medicine for a pain in the side. The white cicers are used more for meat than medicine, yet have they the same effect, and are thought more powerful to increase milk and seed.

The wild cicers are so much more powerful than the garden kinds, by how much they exceed them in heat and drynes, whereby they are more effectual in opening obstructions, breaking the stone, and having all the properties of cutting, opening, digesting, and dissolving, more speedily and certainly than the former.

### C I N Q U E F O I L. POTENTILLA.

IT is called in some countries, five-fingered grass, or five-leaved grass.

DESCRIPTION. This spreadeth and creepeth far upon the ground, with long slender

slender strings like strawberries, which take root again, and shoot forth many leaves made of five parts, and sometimes of seven, dented about the edges, and somewhat hard. The stalks are slender, leaning downwards, and bear many small yellow flowers thereon, with some yellow threads in the middle, standing about a smooth green head; which when it is ripe is a little rough, and containeth small brownish seed. The root is of a blackish brown colour, seldom so big as one's little finger, but growing long, with some threads thereat; and by the small strings it quickly spreadeth over the ground.

PLACE. It groweth by wood-sides, hedge-sides, the pathways in fields, and in the borders and corners of them, almost in every part of this kingdom.

TIME. In flowereth in summer, some sooner, some later.

GOVERNMENT AND VIRTUES. This is an herb of Jupiter, and therefore strengtheneth the parts of the body that he rules; let Jupiter be angular and strong when it is gathered, and if you give but a scruple, which is only twenty grains, of it at a time, either in white wine or white-wine vinegar, you shall seldom miss the cure of an ague, be it what ague soever, in three fits, as I have often proved, to the admiration both of myself and others. It is an especial herb used in all inflammations and fevers, whether infectious or pestilential; or among other herbs to cool and temper the blood and humours in the body: as also for all lotions, gargles, injections, and the like, for sore mouths, ulcers, cankers, fistulas, and other corrupt, foul, or running, sores. The juice hereof drunk about four ounces at a time, for certain days together, cureth the quinsey and the yellow jaundice; and, taken for thirty days together, cureth the falling sickness. The roots boiled in milk, and drunk, is a most effectual remedy for all fluxes in man or woman, whether the whites or reds; also the bloody flux. The roots boiled in vinegar, and the decoction thereof held in the mouth, easeth the pains of the tooth-ach. The juice or decoction taken with a little honey, helpeth the hoarseness of the throat, and is very good for the cough of the lungs. The distilled water both of the root and leaves is also effectual to all the purposes aforesaid; and if the hands are often washed therein, and suffered at every time to dry it of itself without wiping, it will in a short time help the palsy or shaking in them. The root boiled in vinegar, helpeth all knots, kernels, hard swellings, and lumps, growing in any part of the flesh, being thereto applied; as also all inflammations, St. Anthony's fire, likewise all imposthumes, and painful sores, with heat and putrefaction, the shingles, and all other sorts of running and foul scabs, sores, and the itch. The same also boiled in wine, and applied to any painful or aching joints, or the gout in the hands or feet, or the hip-gout, called the sciatica, and the decoction thereof drunk at the same time, doth

enre them, and easeth violent pains in the bowels. The roots are likewise effectual to help ruptures or burstings, being used with other things available to that purpose, taken either inwardly or outwardly, or both; as also for bruises, or hurts, by blows, falls, or the like; and to stay the bleeding of wounds in any part, either inward or outward.

Some hold that one leaf cures a quotidian, three a tertian, and four a quartan, ague; but, with respect to the number of leaves, it is a matter of no consequence, or whether it is given in powder or decoction: if Jupiter were strong, and the Moon applying to him, or his aspect good at the gathering of it, I never knew it miss the desired effects.

### C I V E S. ALLIUM.

THEY are also called rush-leeks, chives, civet, and sweth.

TEMPERATURE AND VIRTUES. I confess I had not added these, had it not been for a letter I received of a country gentleman, who certified me that amongst other herbs I had left these out. They are indeed a kind of leeks, hot and dry in the fourth degree as they are, and also under the dominion of Mars; if they are eaten raw, (I do not mean raw opposite to roasted or boiled, but raw opposite to a chemical preparation,) they send up very hurtful vapours to the brain, causing troublesome sleep, and spoiling the eye-sight; yet of them prepared by the art of the alchymist may be made an excellent remedy for stoppage of urine.

### C L A R Y. SALLIA.

DESCRIPTION. OUR ordinary garden clary, or clear-eye, hath four-square stalks, with broad, rough, wrinkled, whitish, hairy, green leaves, somewhat evenly cut on the edges, and of a strong sweet scent, growing some near the ground, and some by couples upon stalks: the flowers grow at certain distances with two small leaves at the joints under them, somewhat like the flowers of sage, but smaller, and of a whitish blue colour; the seed is brownish and somewhat flat, or not so round as the wild: the roots are blackish, and do not spread far; it perisheth after the seedling time. It is usually sown, for it seldom riseth of its own sowing.

PLACE. This groweth in gardens.

TIME. It groweth in June or July, some a little later than others, and their seed is ripe in August, or thereabout.

GOVERNMENT

GOVERNMENT AND VIRTUES. It is under the dominion of the Moon. The seed is used to be put into the eyes to clear them from moats, or other such-like things gotten within the lids to offend them, as also to cleanse them from white or red spots in them. The mucilage of the seed made with water, and applied to tumours or swellings, disperfeth and taketh them away; and also draweth forth splinters, thorns, or other things gotten into the flesh. The leaves used with vinegar, either by itself or with honey, do help hot inflammations, as also biles, fellons, and the hot inflammations that are gathered by their pains, if it be applied before they are grown too great. The powder of the dried root put into the nose provoketh sneezing, and thereby purgeth the head and brain of much rheum and corruption. The seed or leaves, taken in wine, provoketh to venery. It is of much use both for men and women that have weak backs, to help to strengthen the reins, used either by itself or with other herbs conduced to the same effect, and in tansies, often. The fresh leaves dipped in a batter of flour, eggs, and a little milk, and fried in butter, and served to the table, are not unpleasant to any, but exceeding profitable for those that are troubled with weak backs, and the effects thereof. The juice of the herb put into ale or beer, and drunk, bringeth down women's courses, and expelleth the after-birth.

It is an usual course with many men when they have gotten the running of the reins, or women the whites, they have immediate recourse to the clary-bush, which having fried in butter, they eagerly eat in expectation of instant relief, but to their great disappointment often find themselves worse than before they had tried this expedient. We will grant that clary strengthens the back; but this we deny, that the cause of the running of the reins in men, or the whites in women, lies in the back, (though the back may be sometimes weakened by them;) consequently the application of this medicine is frequently improper.

#### WILD CLARY. HORMENUM.

WILD CLARY is often, though I think imprudently, called *Christ's eye*, because it cureth the diseases of the eyes.

DESCRIPTION. It is like the other clary, but less, with many stalks about a foot and a half high; the stalks are square and somewhat hairy; the flowers of a bluish colour. He that knows the common clary cannot be ignorant of this.

PLACE. It grows commonly in this kingdom, in barren places; you may find it plentifully if you look in the fields near Gray's Inn, and the fields near Chelsea.

TIME. They flower from the beginning of June to the latter end of August.

GOVERNMENT

**GOVERNMENT AND VIRTUES.** It is something hotter and drier than the garden clary, yet nevertheless under the dominion of the Moon, as well as that; the seeds of it being beaten to powder and drunk in wine, is an admirable help to provoke lust; decoction of the leaves being drunk warms the stomach, and it is a wonder if it should not, the stomach being under Cancer, the house of the Moon. It helps digestion, scatters congealed blood in any part of the body, and helps dimness of sight; the distilled water thereof cleanseth the eyes of redness, waterishness, and heat; it is a gallant remedy for dimness of sight, to take one of the seeds of it and put into the eye, and there let it remain till it drops out of itself, the pain will be nothing to speak of: it will cleanse the eyes of all filthy and putrid matters, and, in often repeating of it, will take off a film which covereth the sight; a handsomer, safer, and easier, remedy, a great deal, than to tear it off with a needle.

#### C L E A V E R S. G A L I U M.

IT is also called aparine, goose-share, and goose-graſs.

**DESCRIPTION.** The common cleavers hath divers very rough square stalks, not so big as the tag of a point, but rising up to be two or three yards high sometimes, if it meets with any tall bushes or trees whereon it may climb, yet without any claspers; or else much lower, and lying upon the ground, full of joints; and at every one of them shooteth forth a branch, besides the leaves thereat, which are usually fix, set in a round compass like a star; or the rowel of a spur: from between the leaves of the joints, towards the tops of the branches, come forth very small white flowers at every end upon small thready footstalks, which after they are fallen, there do show two small, round, rough, seeds; and these when they are ripe grow hard and whitish, having a little hole on the side somewhat like unto a navel. Both stalks, leaves, and seeds, are so rough, that they will cleave unto any thing that shall touch them. Its root is small and thready, spreading much in the ground, but dieth every year.

**PLACE.** It groweth by hedge and ditch sides, in many places of this land; and is so troublesome an inhabitant in gardens, that it climbeth upon and is ready to choke whatever grows near it.

**TIME.** It flowereth in June and July, and the seed is ripe, and falleth again, about the end of July or August, from whence it springeth up again, and not from the old roots.

**GOVERNMENT AND VIRTUES.** It is under the dominion of the Moon. The juice of the herb, and the seed taken in wine, helpeth those that are bitten with an adder, by preserving the heart from the venom. It is familiarly taken in broth to

keep

keep those lean and lank that are apt to grow fat. The distilled water drunk twice a-day helpeth the yellow jaundice; and the decoction of the herb by experience is found to do the same, and stayeth the lask and bloody fluxes. The juice of the leaves, or the leaves a little bruised, and applied to any bleeding wound, stayeth the bleeding; the juice is also very good to close up the lips of green wounds: and the powder of the dried herb strewed thereupon doth the same, and likewise helpeth old ulcers. Being boiled with hog's grease, it healeth all sorts of hard swellings or kernels in the throat, being anointed therewith. The juice dropped into the ears taketh away the pains from them. It is a good remedy in the spring, eaten, being first chopped small and boiled well in water-gruel, to cleanse the blood and strengthen the liver, thereby keeping the body in health, and fitting it for that change of season that is coming.

C L O W N's W O U N D W O R T. STACHYS.

**DESCRIPTION.** IT groweth up sometimes to three or four feet high, but usually about two feet, with square, green, rough, stalks, but slender, jointed somewhat far asunder, and two very long, and somewhat narrow, dark-green leaves, bluntly dented about the edges, and ending in a long point. The flowers stand toward the tops, compassing the stalks at the joints with the leaves, and end likewise in a spiked top, having long gaping hoods, of a purplish red colour with whitish spots in them, standing in somewhat rough husks, wherein long afterwards stand blackish round feeds. The root is composed of many strings, with some tuberous long knobs growing among them, of a pale yellowish or whitish colour; yet at some times of the year these knobby roots, in many places, are not seen in the plant; the whole plant smelleth somewhat strongly.

**PLACE.** It groweth in sundry countries of this land, both north and west, and frequently by path-sides in the fields near about London, and within three or four miles distance about it; yet usually grows in or near ditches.

**TIME.** It flowereth in June and July, and the seed is ripe soon after.

**GOVERNMENT AND VIRTUES.** It is under the dominion of the planet Saturn. It is singularly effectual in all fresh and green wounds, and therefore beareth not this name for nought. And is very available in staunching of blood, and to dry up the fluxes of humours in old fretting ulcers, cankers, &c. that hinder the healing of them. A syrup made of the juice of it is inferior to none for inward wounds, ruptures of veins, bloody flux, vessels broken, bloody urine, or spitting of blood: ruptures are excellently and speedily, even to admiration, cured by taking now and

then a little of the syrup, and applying an ointment or plaster of the herb to the place; and also, if any vein be swelled, or muscle cut, apply a plaster of this herb to it, and, if you add a little comfrey to it, it will not do amiss. This herb deserves commendation, though it have gotten but a clownish name; and whoever reads this, if he try it as I have done, will commend it as well as I. It is of an earthy nature.

### C O C K's H E A D. HEDYSARUM.

OTHERWISE called red fitchling, or medic fetch.

DESCRIPTION. This hath divers weak but rough stalks, half a yard long, leaning downwards, beset with winged leaves, longer and more pointed than those of lentils, and whitish underneath; from the tops of those stalks arise up other slender stalks, naked without leaves unto the tops, where there grow many small flowers in manner of a spike, of a pale-reddish colour, with some blueness among them; after which rise up in their places, round, rough, and somewhat flat, heads. The root is tough and somewhat woody, yet liveth and shooteth afresh every year.

PLACE. It groweth under hedges, and sometimes in the open fields, in divers places of this land.

TIME. They flower all the months of July and August, and the seed ripeneth in the mean while.

GOVERNMENT AND VIRTUES. It is under the dominion of Venus. It hath power to ratify and digest, and therefore the green leaves bruised and laid as a plaster, disperse knots, nodes, or kernels, in the flesh; and if, when it is dry, it be taken in wine, it helpeth the strangury; and, being anointed with oil, it provoketh sweat. It is a singular food for cattle, to cause them to give store of milk; and why then may it not do the like being boiled in the ordinary drink of nurses?

### C O L U M B I N E S. AQUILEGIA.

THESE are so well known, growing in almost every garden, that I think I may save the writing a description of them.

TIME. They flower in May, and abide not for the most part when June is past, perfecting their seed in the mean time.

GOVERNMENT AND VIRTUES. It is also an herb of Venus. The leaves of columbines are commonly used in lotions with good success for sore mouths and throats; Tragus faith, that a dram of the seed taken in wine, with a little saffron, openeth obstruc-

obstructions of the liver, and is good for the yellow jaundice, if the party after the taking thereof be laid to sweat well in his bed; the seed also taken in wine causeth a speedy delivery of women in child-birth; if one draught suffice not, let her drink a second, and it will be effectual. The Spaniards use to eat a piece of the root hereof fasting, many days together, to help them when troubled with the stone in the reins or kidneys.

### C O L T S - F O O T. TUSSILAGO.

CALLED also cough-wort, foal's foot, horse-hoof, and bull's foot.

DESCRIPTION. This shooteth up a slender stalk, with small yellowish flowers, somewhat early, which fall away quickly; after they are past, come up somewhat-round leaves, sometimes dented a little about the edges, much less, thicker, and greener, than those of butter-bur, with a little down or freeze over the green leaf on the upper side, which may be rubbed away, and whitish or mealy underneath. The root is small and white, spreading much under ground, so that where it taketh it will hardly be driven away again, if any little piece be abiding therein; and from thence spring fresh leaves.

PLACE. It groweth as well in wet grounds as in drier places.

TIME. It flowereth in the end of February, the leaves beginning to appear in March.

GOVERNMENT AND VIRTUES. The plant is under Venus. The fresh leaves, or juice, or a syrup made thereof, is good for a hot dry cough, for wheezings and shortness of breath: the dry leaves are best for those that have thin rheums and distillations upon their lungs, causing a cough, for which also the dried leaves taken as tobacco, or the root, is very good. The distilled water hereof simply, or with elder-flowers and nightshade, is a singular remedy against all hot agues, to drink two ounces at a time, and apply cloths wet therein to the head and stomach; which also doth much good being applied to any hot swellings or inflammations; it helpeth St. Anthony's fire and burnings, and is singular good to take away wheals and small pushes that arise through heat; as also the burning heat of the piles, or privy parts, cloths wet therein being thereunto applied.

### C O M F R E Y. SYMPHYTUM.

DESCRIPTION. THE common great comfrey hath divers very large and hairy green leaves, lying on the ground, so hairy or prickly, that, if they touch any tender parts of the hands, face, or body, it will cause it to itch; the stalk that riseth up from

from among them, being two or three feet high, hollowed, and cornered; as also very hairy, having many such-like leaves as grow below, but leſs and leſs up to the top. At the joints of the stalks it is divided into many branches, with ſome leaves thereon; and at the ends ſtand many flowers in order one above another, which are ſomewhat long and hollow, like the finger of a glove, of a pale whitish colour, after which come ſmall black ſeed. The roots are great and long, ſpreading great thick branches under ground, black on the outside and whitish within, ſhort or eaſy to break, and full of a glutinous or clammy juice, of little or no taste.

There is another ſort, in all things like this, ſave only it is ſomewhat leſs, and beareth flowers of a pale purple colour.

PLACE. They grow by ditches and water-sides, and in divers fields that are moist, for therein they chiefly delight to grow: the firſt generally through all the land, and the other not quite ſo common.

TIME. They flower in June and July, and give their ſeed in August.

GOVERNMENT AND VIRTUES. This is also an herb of Saturn, and I ſuppoſe under the ſign Capricorn, cold, dry, and earthy, in quality. What was ſpoken of clown's woundwort may be ſaid of this. The great comfrey helpeth thoſe that ſpit blood, or make a bloody urine: the root boiled in water or wine, and the decoction drunk, helpeth all inward hurts, bruifes, and wounds, and the ulcers of the lungs, causing the phlegm that opprefſeth them to be easily ſpit forth; it stayeth the defluxions of rheum from the head upon the lungs, the fluxes of blood or humours by the belly, women's immoderate courſes, as well the reds as the whites; and the running of the reins, happening by what cauſe ſoever. A ſyrup made thereoſt is very eſſeſtual for all thoſe inward griefs and hurts; and the diſtilled water for the ſame purpose alſo, and for outward wounds and ſores in the fleſhy or ſinewy part of the body whereſoever; as alſo to take away the fits of agues, and to allay the ſharpenes of humours. A decoction of the leaves hereoſt is available to all the purpoſes, though not ſo eſſeſtual as of the roots. The root, being outwardly applied, helpeth fresh wounds or cuts imme‐diately, being bruifed and laid thereunto; and is eſpecial good for ruptures and broken bones; yea, it is ſaid to be ſo powerful to conſolidate and knit together, that, if they are boiled with diſſevered pieces of fleſh in a pot, it will join them together again. It is good to be applied to women's breasts that grow ſore by the abundance of milk coming into them; as alſo to repreſs the overmuch bleeding of the hemorroids, to cool the inflammation of the parts thereabout, and to give eaſe of pains. The roots of comfrey taken fresh, beaten ſmall, and ſpread upon leather, and laid upon any place troubled with the gout, do preſently give eaſe of the pains; and, ap‐plied

plied in the same manner, give ease to pained joints, and profit very much for running and moist ulcers, gangrenes, mortifications, and the like, for which it hath by often experience been found helpful.

### CORAL-WORT. \* ERYTHRINA.

IT is also called by some, tooth-wort, toothed violet, dog-teeth-violet, and dentaris.

DESCRIPTION. Of the many sorts of this herb, two of them may be found growing in this kingdom; the first of which shooteth forth one or two winged leaves upon long brownish footstalks, which are doubled down at their first coming out of the ground: when they are fully opened they consist of seven leaves, most commonly of a fad-green colour, dented about the edges, set on both sides the middle rib one against another, like the leaves of the ash-tree. The stalk beareth no leaves on the lower half of it; the upper half beareth sometimes three or four, each consisting of five leaves, sometimes but of three; on the top stand four or five flowers upon short footstalks, with long husks; the flowers are very like those of the stock-gilliflower, of a pale purplish colour, consisting of four leaves apiece, after which come small pods which contain the seed: the root is very smooth, white, and shining; it doth not grow downwards, but creeping along under the upper crust of the ground, and consisteth of divers small round knobs, set together. Towards the top of the stalk there grow small single leaves, by each of which cometh a small round cloven bulb, which when it is ripe, if it be set in the ground, it will grow to be a root, and is esteemed a good way of cultivating the herb.

As for the other coral-wort which groweth in this nation, it is more scarce than this, being a very small plant, not much unlike crowfoot; therefore some think it to be one of the sorts of crowfoot. I know not where to direct you to it, and therefore shall forbear the description.

PLACE. The first groweth near Mayfield in Sussex, in a wood called High-reed; and in another wood there also, called Fox-holes.

TIME. They flower from the latter end of April to the middle of May; and before the middle of July they are gone, and not to be found.

GOVERNMENT AND VIRTUES. It is under the dominion of the Moon. It cleanseth the bladder and provoketh urine, expels gravel and the stone; it easeth pains in the sides and bowels; it is excellent good for inward wounds, especially such as are made in the breast or lungs, by taking a dram of the powder of the

root every morning in wine ; the same is excellent good for ruptures, as also to stop fluxes : an ointment made of it is exceeding good for wounds and ulcers, for it soon drieth up the watery humour which hinders the cure.

### C O S T M A R Y. TANACETUM.

CALLED also alecost, or balsam-herb.

This is so frequently known to be an inhabitant in almost every garden, that I suppose it needless to write a description thereof.

TIME. It flowereth in June and July.

GOVERNMENT AND VIRTUES. It is under the dominion of Jupiter. The ordinary costmary, as well as maudlin, provoketh urine abundantly, and moisteneth the hardness of the mother; it gently purgeth choler and phlegm, extenuating that which is gross, and cutting that which is tough and glutinous; cleanseth that which is foul, and hindereth putrefaction and corruption; it dissolveth without attraction, openeth obstructions, and healeth their evil effects, and is a wondrous help to all sorts of dry agues. It is astringent to the stomach, and strengtheneth the liver, and all the other inward parts; and if taken in whey worketh the more effectually. Taken fasting in the morning, it is very profitable for the pains of the head that are continual; and to stay, dry up, and consume, all thin rheums, or distillations from the head into the stomach, and helpeth much to digest raw humours that are gathered therein. It is very profitable for those that are fallen into a continual evil disposition of the whole body called cachexia, being taken, especially in the beginning of the disease. It is a good friend and help to evil, weak, and cold, livers. The seed is familiarly given to children for the worms, and so is the infusion of the flowers in white wine, given them to the quantity of two ounces at a time: it maketh an excellent salve to cleanse and heal old ulcers, being boiled with olive-oil, and adder's tongue with it; and, after it is strained, to put in a little wax, rosin, and turpentine, to bring it to a proper consistence.

### C U D W E E D. GNAPHALIUM.

BESIDES cudweed, it is also called cotton-weed, chaffweed, dwarf cotton, and petty cotton.

DESCRIPTION. The common cudweed riseth up with one stalk, though sometimes two or three, thick set on all sides with small, long, and narrow, whitish or woody, leaves, from the middle of the stalk almost up to the top; with every leaf standeth

standeth a small flower of a dun brownish-yellow colour, or not so yellow as others, in which herbs, after the flowers are taken, come small seed wrapped up with the down therein, and is carried away with the wind. The root is small and thready

There are other sorts hereof, which are somewhat less than the former, not much different, save only that the stalk and leaves are shorter, and the flowers are paler, and more open.

PLACE. They grow in dry, barren, sandy, and gravelly, grounds, in most places of this land.

TIME. They flower about July, some earlier and some later, and their seed is ripe in August.

GOVERNMENT AND VIRTUES. Venus is lady of it. The plants are all astringent, or binding and drying, and therefore profitable for defluxions of rheum from the head, and to stay fluxes of blood wheresoever. The decoction being made into red wine and drunk, or the powder taken therein, also helpeth the bloody flux, and easeth the torments that come thereby; stayeth the immoderate courses of women; and is also good for inward or outward wounds, hurts, and bruises; and helpeth children both of burstings and the worms, and the disease called tenesmus, which is an often provocation to the stool, and doing nothing, being either drunk or injected. The green leaves bruised and laid to any green wound, stay the bleeding, and heal it up quickly; the decoction or juice thereof doth the same, and helpeth old and filthy ulcers quickly. The juice of the herb taken in wine and milk, is (as Pliny saith) a sovereign remedy against the mumps and quinsy; and he farther saith, that whosoever shall so take it shall never be troubled with that disease again. The tops of this plant, before it has reached its full growth, have the same virtue. I have seen it used only in one place. It is frequent in Charlton Forest, in Sussex, and was given with success for that almost-incurable disease the chin-cough. Beat it up into a conserve, very fine, with a good deal of sugar, and let the bigness of a pea be eaten at a time.

#### C O W S L I P S. PRIMULA.

KNOWN also by the name of *peagles*.

Both the wild and garden cowslips are so well known, that I will neither trouble myself nor the reader with any description of them.

TIME. They flower in April and May.

GOVERNMENT AND VIRTUES. Venus lays claim to the herb as her own, and it is under the sign Aries; and our city dames know well enough the ointment or distilled water of it adds beauty, or at least restores it when it is lost. The flowers

are

are held to be more effectual than the leaves, and the roots of little use. An ointment being made with them, taketh away spots and wrinkles of the skin, sun-burning, and freckles, and adds beauty exceedingly; they remedy all infirmities of the head coming of heat and wind, as vertigo, ephialtes, false apparitions, phrenses, falling sickness, palsies, convulsions, cramps, and pains in the nerves. The roots ease pains in the back and bladder, and open the passages of urine. The leaves are good in wounds, and the flowers take away trembling. If the flowers be not well dried and kept in a warm place, they will soon putrefy and look green; have a special eye over them. If you let them see the sun once a month, it will do them no harm.

Because they strengthen the brain and nerves, and remedy the palsy, the Greeks gave them the name of *paralysis*. The flowers preserved or conserved, and the quantity of a nutmeg eaten every morning, is a sufficient dose for inward diseases; but for wounds, spots, wrinkles, and sun-burning, an ointment is made of the leaves and hog's grease.

#### C R A B 's C L A W S. STRATIOTES.

CALLED also water sengreen, knight's pond-water, water houseleek, pond-weed, and fresh-water soldier.

DESCRIPTION. It hath sundry long, narrow, sharp-pointed, leaves, with sharp prickles on the edges of them; the stalks which bear the flowers seldom grow so high as the leaves, bearing a forked head like a crab's claw, out of which comes a white flower, consisting of three leaves, with divers yellowish hairy threads in the middle; it taketh root in the mud, in the bottom of the water.

PLACE. It groweth plentifully in the fens of Lincolnshire.

TIME. It flowereth in June, and is usually in flower from thence till August.

GOVERNMENT AND VIRTUES. It is a plant under the dominion of Venus, and therefore a great strengthener of the reins; it is excellent good in that inflammation which is commonly called St. Anthony's fire; it assuagest all inflammations and swellings in wounds; and an ointment made of it is excellent good to heal them; there is scarcely a better remedy growing than this for such as have bruised their kidneys, and upon that account pissing blood. A dram of the powder of the herb taken every morning is a very good remedy to stop the terms.

#### B L A C K C R E S S E S. CARDAMINE.

DESCRIPTION. IT hath long leaves deeply cut and jagged on both sides, not much unlike wild mustard; the stalks are small, very limber though very tough; you may

may twist them round as you may a willow before they break. The flowers are very small and yellow, after which come small pods which contain the seed.

PLACE. It is a common herb, growing usually by the way-sides, and sometimes upon mud-walls about London; but it delights most to grow among stones and rubbish.

TIME. It flowers in June and July, and the seed is ripe in August and September.

GOVERNMENT AND VIRTUES. It is under the dominion of Mars, and is a plant of a hot and biting nature: the truth is, the seed of black cresses strengthens the brain exceedingly, for in performing that office it is little inferior to mustard-seed, if at all: they are excellent good to stay those rheums which fall down from the head upon the lungs. You may beat the seed into powder if you please, and make it up into an electuary with honey, so have you an excellent remedy by you, not only for the premises, but also for the cough, yellow jaundice, and sciatica. The herb boiled into a poultice is an excellent remedy for inflammations both in women's breasts and in men's testicles.

#### SCIATICA-CRESSES. IBERIS.

DESCRIPTION. THESE are of two kinds; the first riseth up with a round stalk, about two feet high, spread into divers branches, whose lower leaves are somewhat larger than the upper, yet all of them cut or torn on the edges, somewhat like garden-cresses, but smaller: the flowers are small and white, growing on the tops of the branches, where afterwards grow husks, with smallish brown seed therein, very strong and sharp in taste, more than the cresses of the garden. The root is long, white, and woody.

The other sort hath the lower leaves whole, somewhat long and broad, not torn at all, but only somewhat deeply dented about the edges towards the ends, but those that grow higher up are less. The flowers and seeds are like the former, and so is the root likewise: and both root and seed as sharp as it.

PLACE. These grow by the way-sides in un-tilled places, and by the sides of old walls.

TIME. They flower in the end of June, and their seed is ripe in July.

GOVERNMENT AND VIRTUES. It is a Saturnine plant: the leaves, but especially the roots, taken fresh in the summer-time, beaten and made into a poultice or salve with old hog's grease, and applied to the places pained with the sciatica, to continue thereon four hours if it be on a man, and two hours on a woman, the

place afterwards bathed with wine and oil mixed together, and then wrapped with wool of skins after they have sweat a little, will assuredly cure not only the same disease in the hips, huckle-bone, or other of the joints, as gout in the hands or feet, but all other old griefs of the head, (as inveterate rheums,) and other parts of the body that are hard to be cured. And, if of the former griefs any parts remain, the same medicine after twenty days is to be applied again. The same is also effectual in the disease of the spleen; and, applied to the skin, it taketh away the blemishes thereof, whether they be scars, leprosy, scabs, or scurf, which, if it ulcerate the part, is to be helped afterwards with a salve made of oil and wax. Either boiled or eaten in sallads, they are very wholesome. For children's scabs or scalded heads, nothing is so effectual and quick a remedy as garden-cresses beat up with lard, for it makes the scales fall in twenty-four hours, and perfectly cures them if they continue the use of it. Esteem this as a valuable secret.

#### W A T E R - C R E S S E S . S I S Y M B R I U M .

**DESCRIPTION.** OUR ordinary water-cresses spread forth, with many weak, hollow, sappy, stalks, shooting out fibres at the joints, and upwards, long winged leaves, made of sundry broad, sappy, and almost-round, leaves, of a brownish-green colour: the flowers are many and white, standing on long footstalks, after which come small yellow seed, contained in small long pods like horns; the whole plant abideth green in the winter, and tasteth somewhat hot and sharp.

**PLACE.** They grow for the most part in small standing waters, yet sometimes in small rivulets of running water.

**TIME.** They flower and seed in the beginning of summer.

**GOVERNMENT AND VIRTUES.** It is an herb under the dominion of the Moon. It is more powerful against the scurvy, and to cleanse the blood and humours, than brooklime, and serves to all the other uses in which brooklime is available; as to break the stone, and provoke urine and women's courses. It is also good for them when troubled with the green-sickness, and is a certain restorative of their lost colour if they use it in the following manner: chop and boil them in the broth of meat, and eat them for a month together, morning, noon, and night. The decoction thereof cleanseth ulcers by washing therewith: the leaves bruised, or the juice, is good to be applied to the face or other parts troubled with freckles, pimples, spots, or the like, at night, and washed away in the morning. The juice mixed with vinegar, and the fore-part of the head bathed therewith, is very good for those that are dull and drowsy, or have the lethargy.

Water-

Water-cress pottage is a good remedy to cleanse the blood in the spring, and help head-achs, and consume the gross humours winter has left behind ; those who would live in health may make use of this ; if any fancy not pottage, they may eat the herb as a salad.

### C R O S S - W O R T .   V A L A N T I A .

**DESCRIPTION.** COMMON cross-wort growtheth with square hairy brown stalks little above a foot high, having four small, broad, and pointed, hairy, yet smooth, green leaves, growing at every joint, each against other crossways, which has caused the name. Toward the tops of the stalks at the joints, with the leaves, in three or four rows downward, stand small pale-yellow flowers, after which come small, blackish, round seeds, four for the most part in every husk ; the root is very small, and full of fibres or threads, taking good hold of the ground, and spreading with the branches a great deal of ground, which perish not in winter, although the leaves die every year, and spring again anew.

**PLACE.** It growtheth in many moist grounds, as well meadows as untilled places, about London, in Hampstead church-yard, at Wye in Kent; and sundry other places.

**TIME.** It flowereth from May all the summer long, in one place or another, as they are more open to the sun ; the seed ripeneth soon after.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Saturn. This is a singular good wound-herb, and is used inwardly, not only to stay bleeding of wounds, but to consolidate them, as it doth outwardly any green wound, which it quickly drieth up and healeth. The decoction of the herb in wine helpeth to expectorate phlegm out of the chest, and is good for obstructions in the breast, stomach, or bowels, and helpeth a decayed appetite. It is also good to wash any wound or sore with, to cleanse and heal it. The herb bruised and then boiled, and applied outwardly for certain days together, renewing it often, and in the mean time the decoction of the herb in wine taken inwardly every day, doth certainly cure the rupture in any, so as it be not too inveterate; but very speedily, if it be fresh and lately taken.

### C R O W F O O T .   R A N U N C U L U S .

MANY are the names this furious biting herb hath obtained : it is called frog's foot, from the Greek name *barrakion* ; crowfoot, gold-knobs, gold cups, king's-knob, basiners, troil-flowers, polts, locket-goulions, and butter-flowers.

Abundant

Abundant are the sorts of this herb, and to describe them all would tire the patience of Socrates himself; therefore I shall only mention the most usual.

**DESCRIPTION.** The most common crowfoot hath many dark-green leaves, cut into divers parts, in taste biting and sharp, and blistering the tongue; it bears many flowers, and those of a bright resplendent yellow colour. I do not remember that I ever saw any thing yellower. Virgins in ancient times used to make powder of them to furrow bride-beds. After the flowers come small heads, somewhat spiked and rugged like a pine-apple.

**PLACE.** They grow very common every-where; unless you turn your head into a hedge, you cannot but see them as you walk.

**TIME.** They flower in May and June, even till September.

**GOVERNMENT AND VIRTUES.** This fiery and hot-spirited herb of Mars is no way fit to be given inwardly; but an ointment of the leaves or flowers will draw a blister, and may be so fitly applied to the nape of the neck, to draw back rheum from the eyes. The herb being bruised, and mixed with a little mustard, draws a blister as well and perfectly as cantharides, and with far less danger to the vessels of urine, which cantharides naturally delight to wrong. I knew the herb once applied to a pestilential rising that was fallen down, and it saved life even beyond hope; it were good keeping an ointment and plaster of it, if it were but for that.

#### C U C K O W - P I N T . ARUM.

IT is called alron, janus, and barba-aron, calves-foot, ramp, starch-wort, cuckow-pintle, priest's pintle, and wake-robin. *Arum* is the systematic name.

**DESCRIPTION.** This shooteth forth three, four, or five leaves at the most, from one root, every one whereof is somewhat large and long, broad at the bottom next the stalk, and forked, but ending in a point, without a cut on the edges, of a full green colour, each standing upon a thick round stalk, of a handful breadth long, or more; among which, after two or three months that they begin to wither, riseth up a bare, round, whitish-green, stalk, spotted and streaked with purple, somewhat higher than the leaves; at the top whereof standeth a long hollow house or husk, close at the bottom, but open from the middle upwards, ending in a point; in the middle whereof stands a small long pestle or clapper, smaller at the bottom than at the top, of a dark-purple colour, as the husk is on the inside, though green without; which, after it so abideth for some time, the husk with the clapper decayeth, and the foot or bottom thereof groweth to be a small long bunch of berries, green at the first,

and

and of a yellowish-red colour when they are ripe, of the size of a hazel-nut kernel, which abideth thereon almost until winter; the root is round, and somewhat long, for the most part lying along, the leaves shooting forth at the bigger end, which, when it beareth its berries, are somewhat wrinkled and loose, another growing under it, which is solid and firm, with many small threads hanging thereat. The whole plant is of a very sharp biting taste, pricking the tongue as nettles do the hands, and so abideth for a great while without alteration. The root hereof was anciently used instead of starch to starch linen.

There is another sort of cuckow-pint, with smaller leaves than the former, and sometimes harder, having blackish spots upon them, which for the most part abide longer green in summer than the former, and both leaves and roots are more sharp and fierce than it; in all things else it is like the former.

PLACE. These two sorts grow frequently almost under every hedge-side in many places of this land.

TIME. They shoot forth leaves in the spring, and continue only until the middle of summer or somewhat later; their husks appearing before they fall away, and their fruit showing in April.

GOVERNMENT AND VIRTUES. It is under the dominion of Mars. Tragus reporteth, that a dram weight, or more if need be, of the spotted wake-robin, either fresh and green, or dried, being eaten or taken, is a most present and sure remedy for poison and the plague. The juice of the herb taken to the quantity of a spoonful, hath the same effect; but if there be a little vinegar added thereunto, as well as unto the root aforesaid, it somewhat allayeth the sharp biting taste thereof upon the tongue. The green leaves bruised, and laid upon any boil or plague-sore; do very wonderfully help to draw forth the poison. A dram of the powder of the dried root taken with twice as much sugar, in the form of a licking electuary, or the green root, doth wonderfully help those that are pursy or short-winded, as also those that have a cough; it breaketh, digesteth, and riddeth away, phlegm from the stomach, chest, and lungs: the milk, wherein the root hath been boiled, is effectual also for the same purpose. The said powder, taken in wine or other drink, or the juice of the berries, or the powder of them, or the wine wherein they have been boiled, provoketh urine, and bringeth down women's courses, and purgeth them effectually after child-bearing, to bring away the after-birth: taken with sheep's milk, it healeth the inward ulcers of the bowels. The distilled water hereof is effectual to all the purposes aforesaid. A spoonful taken at a time healeth the itch; and an ounce or more, taken at a time for some days together, doth help the rupture; the leaves, either green or dry, or the juice of them, do cleanse all manner of rotten and filthy ulcers, in what part of the body soever, and healeth the stinking sores in the nose, called polypus.

The water wherein the root hath been boiled, dropped into the eyes, cleanseth them from any film or skin, cloud or mist, which begins to hinder the sight, and helpeth the watering and redness of them; or when by accident they become black and blue. The root mixed with bean-flour, and applied to the throat or jaws that are inflamed, helpeth them; the juice of the berries boiled in oil of roses, or beaten into powder mixed with the oil, and dropped into the ears, easeth pains in them; the berries or the roots, beaten with hot ox-dung, and applied, ease the pains of the gout: the leaves and roots boiled in wine with a little oil, and applied to the piles, or the falling-down of the fundament, give ease, and so doth sitting over the hot fumes thereof: the fresh roots bruised, and distilled with a little milk, yield a most sovereign water to cleanse the skin from scurf, freckles, spots, or blemishes whatsoever. The country people about Maidstone in Kent use the herb and root instead of soap.

#### C U C U M B E R S. *Cucumis.*

ACCORDING to the pronunciation of the vulgar, *cowcumbers*.

GOVERNMENT AND VIRTUES. There is no dispute to be made, but that they are under the dominion of the Moon, though they are so much rejected for their coldness; it is by some affirmed, that if they were but one degree colder they would be poison. The best of Galenists hold them to be cold and moist but in the second degree, and then not so hot as lettuce or purslain: they are excellent good for hot stomachs and livers; the immeasurable use of them fills the body full of raw humours, and so indeed does any thing else when used to an excess. The juice of cucumbers, the face being washed with it, cleanseth the skin, and is excellent good for hot rheums in the eyes; the seed is excellent to provoke urine, and cleanse the passages thereof when they are stopped; neither do I think there is a better remedy for ulcers in the bladder than cucumbers. The usual course is to use the seeds in emulsions, as they make almond-milk; but a better way by far (in my opinion) is this: When the season of the year is, take the cucumbers, and bruise them well, and distil the water from them, and let such as are troubled with ulcers in their bladders drink no other drink. The face being washed with the same water, be it never so red, will be benefited by it, and the complexion very much improved. It is also excellent good for sun-burning, freckles, and morphew.

#### C U B E B S. *Piper.*

CUBEBS are small berries, somewhat sweet, about the bigness of pepper-corns, yet not so black nor solid, but more rugged or crested, being either hollow, or having a kernel within it, of a hot taste, but not so fiery as pepper; and having each a short stalk on them like a tail: these grow on trees less than apple-trees, with leaves

leaves narrower than those of pepper; the flower is sweet, and the fruit groweth clustering together. The Arabians call them *quabebe*, and *quabebe chini*: they grow plentifully in Java; they are used to stir up venery, and to warm and strengthen the stomach, being overcome with phlegm or wind; they cleanse the breast of thick tough humours, help the spleen, and are very profitable for the cold griefs of the womb. Being chewed in the mouth with mastic, they draw rheum from the head, and strengthen the brain and memory.

#### RED, WHITE, AND BLACK, CURRANTS. RIBES.

**NAMES.** THE Latin names for currants are *ribes*; *ribes* and *fructo rubro* the red currant, *albo* white, and *nigro* black.

**DESCRIPTION.** The red-currant bush hath a stalk covered with a thin brownish bark outwards, and greenish underneath; the leaves are of a blackish green, cut on the edges into five parts, much like a vine-leaf, but smaller; the flowers come forth at the joints of the leaves, many together on a long stalk, hanging down about a finger's length; of an herby colour, after which come round berries, green at the first, but red when they are ripe: of a pleasant tart taste, wherein is small seed: the root is woody and spreading.

There is another sort thereof, whose berries are twice as large as the former, and of a better relish.

The white-currant tree hath a taller and straighter stem than the red, a whiter bark, and smaller leaves, but hath such-like berries upon long stalks, of the same bigness as the first, but of a shining transparent whiteness, and of a more pleasant taste than the former.

The black currant riseth higher than the last, and is thicker set with branches round about, and more pliant; the younger covered with a pale, and the elder with a browner, bark; the leaves are smaller than those of the former, and often with fewer cuts therein: the flowers are like, but of a greenish-purple colour, which produce small black berries; the leaves and fruit have an unpleasant smell; but yet are wholesome, though not pleasant.

**PLACE.** All these sorts of currants grow plentifully in England, in gardens where they are planted; they have been found growing naturally wild in Savoy in Swisserland, as Gesner saith; and some in Austria, saith Clusius. They grow in great abundance in Candia, and other places in the Streights, from whence in great quantities they are brought dried unto us.

**TIME.** They flower and bear fruit in June, July, and August.

**GOVERNMENT AND VIRTUES.** Currants are under the influence of the benevolent planet Venus; they are of a moist, temperate, refreshing, nature; the red and

and white currants are good to cool and refresh faintings of the stomach, to quench thirst, and stir up an appetite; and therefore are profitable in hot and sharp agues. They temper the heat of the liver and blood, and the sharpness of choler, and resist putrefaction; they also take away the loathing of meat, and weakness of the stomach from much vomiting, and are good for those that have any looseness of the belly. Gesner saith that the Switzers use them for the cough, and so well they may; for, take dry currants a quarter of a pound, of brandy half a pint, set the brandy on fire, then bruise the currants and put them into the brandy while it is burning, stirring them until the brandy is almost consumed, that it become like unto an electuary, and it is an excellent remedy to be taken hot for any violent cough, cold, or rheum. The black currants and the leaves are used in sauces by those who like the taste and scent of them; which I believe very few do of either.

#### C O C O A-N U T T R E E. Cocos.

DESCRIPTION AND NAMES. THIS groweth to be a large timber-tree, the body covered with a smooth bark, bare or naked, without any branch, to a great height, (for which cause the Indians do either bore holes therein, at certain distances, and knock strong pegs into them, which stick out so far as may serve for footing to get up into the tree, to gather the juice or liquor, and the fruit; or fasten ropes with nails round about the tree, with spaces which serve as steps to go up into it;) and towards the top it spreadeth out into sundry great arms, which bow themselves almost round; with large leaves on them like the date-tree leaf, but larger, whose middle rib is very great, and abiding always green, and with fruit also continually, one succeeding another. From between the lower boughs come forth smaller stalks, hanging down, and bearing sundry flowers on them, like those of the chesnut-tree; after which come large three-square fruit or nuts, ten or twelve, and sometime twenty, thereon together, as big as one's head, or as a small pompon, almost round, but a little smaller at the end, covered with a hard, tough, ash-coloured, thick, bark, an inch thick in some places, and within it a hard, woody, brownish, shell, but black when polished; having at the head or top thereof three holes, somewhat resembling the nose and eyes of a monkey; between which outer bark and this shell grow many gross threads or hairs; within the wooden shell there is a white kernel cleaving close to the side thereof, as sweet as an almond, with a fine sweet water in the middle thereof, as pleasant as milk, which will grow less pleasant, or consume, either by over ripeness or long keeping. This tree is called by the Indians *maro*, in Malacca *trican*, and in other places by several other appellations. The timber of this tree is solid and firm, black and shining, like the walnut-tree, and fit for any building; and Garcias saith,

it is of two sorts, (I suppose he meaneth for two uses,) the one to bear fruit, the other to attract the liquor which issues therefrom, when the branches are cut, or when it is bored, and received into something tied thereunto for that purpose, which liquor they call in their language *sura*; and it sheweth like unto troubled wine, but in taste like new sweet wine, which, being boiled, they call *orraque*; and, being distilled, it yieldeth a spirit like unto our aqua vitae, and it is used for the same purpose as we do ours, and will burn like it: they call it *fula*, and being set in the sun it will become good vinegar, and that which runneth last being set in the sun to grow hard, or boiled to hardnes, will become sugar, which they call *jagra*. Of the inner kernel, while it is fresh, they make bread; the fresher the nuts are, the sweeter is the meat thereof.

GOVERNMENT AND VIRTUES. This is a solar plant; the fruit or kernel of the cocoa-nut doth nourish very much, and is good for lean bodies; they increase the natural feed, and stir up the appetite to venery, and are good to mollify the hoarseness of the throat and voice.

#### C O F F E E. COFFEA.

THIS is reported to be the berries of certain shrubs or bushes growing in Arabia, and from thence into Turkey, and other parts. It is said of itself to be insipid, having neither scent nor taste; but being pounded and baked, as they do prepare it to make the coffee-liquor with, it then stinks most loathsomely, which is an argument of some Saturnine quality in it: the propugners for this filthy drink affirm that it causeth watchfulness; (so doth the stinking hemlock and henbane in their first operation, if unhappily taken into the body, but their worse effects soon follow;) they also say it makes them sober when they are drunk; yet they would be always accounted sober persons, or at least think themselves so, when they can but once sit down in a coffee-house. If there had been any worth in it, some of the ancient Arabian physicians, or others near those parts, would have recorded it; but there is no mention made of any medicinal use thereof, by any author, either ancient or modern; neither can it be indued with any such properties as the indulgers of it feed their fancy with; but this I may truly say of it, *Quod Anglorum corpora, quæ huic liquori tantopere indulgent, in barbarorum naturam degenerasse videntur.*

#### C Y P R E S S - T R E E. CYPRESSUS.

NAMES. It has no other name in English, but this tree is called *cupressus* in Latin; and the nuts or fruit thereof, *nuces cupressi*; in English, cypress-nuts.

No. 11.

Pp

DESCRIP-

**DESCRIPTION.** The cypres-tree hath a thick, straight, long, stem ; upon which grow many slender branches ; which do not spread abroad, but grow up in length towards the top, so that the cypres-tree is not broad, but narrow, growing to a great height ; the bark of the cypres-tree is brown, the timber yellowish, hard, thick, and close, and when it is dry of a pleasant smell, especially if it be set near the fire. The cypres tree hath no particular leaves, but the branches, instead of leaves, bring forth short twigs, cut and snipped in many places, as if they were set about with many small leaves ; the fruit is round, almost as big as a prune or plumb, which being ripe doth open in divers places, and hath in it a flat greyish seed.

**PLACE.** The cypres-tree delights in dry, hilly, and mountainous, places, in hot countries.

**TIME.** The cypres-tree is always green ; the fruit is ripe in September, at the beginning of winter.

**GOVERNMENT AND VIRTUES.** Saturn rules this plant ; the leaves and fruit are dry in the third degree, without any manifest heat, and very astringent ; the fruit of cypress, taken into the body, stoppeth looseness and the bloody-flux, and is good against spitting of blood, and all other issues of blood ; the decoction of the same, made with water, hath the same virtue. The oil, in which the fruit or leaves of cypress have been boiled, doth strengthen the stomach, stayeth vomiting, stoppeth the belly, and all fluxes of the same, and cureth the excoriation or going off of the skin from the secret members. Cypress-nuts cure those who are bursten and that have their bowels fallen into the scrotum, being outwardly applied in cataplasms thereto ; the leaves have the same virtue, but not so strong ; the fruit of cypres is also good to cure the polypus, which is corrupt flesh growing in the nose. The same, bruised with dry figs, doth cure the blasting and swelling of the yard and stones ; and, if leavens be added thereto, it dissolveth and wasteth blotches and boils, being laid upon the grieved place. The leaves of cypres, boiled in sweet wine or mead, help the strangury, and issue of the bladder ; the same beaten very small and applied, close up green wounds, and stop the bleeding thereof ; and, being applied with parched barley-meal, they are profitable against St. Anthony's fire, carbuncles, and other ulcers, and fretting sores ; the leaves and fruit of cypres, being infused in vinegar, and the hair washed therewith, make it black.

### C E D A R - T R E E. JUNIPERUS.

**NAMES.** There are two kinds hereof, the great and the small. Out of the great tree issueth a white rosin, called in Latin *cedria*, and *liquor cedrinus*, or liquor of cedar.

DESCRIP-

**DESCRIPTION.** The greater cedar groweth very tall, high, great, and thick; the bark from the foot of the stem unto the first branches is rough, and from thence up to the top it is smooth and plain, of a dark-blue colour, out of which there droppeth white rosin of its own kind, which is most odoriferous; or of a sweet smell, and by the heat of the sun it becomes dry and hard; the limbs and branches of this tree are long, and parted into many other small branches, standing directly one against another, like those of the fir-tree; the said branches are garnished with many small leaves, thick and short, having a sweet favour; the fruit is like that of the fir-tree.

Of the smaller cedar there are two kinds. The first kind of small cedar is much like to juniper, but somewhat smaller; the stem is crooked or writhed, and covered with a rough bark; the fruit is round berries, like juniper-berries, but somewhat greater; of colour, at the first green, then yellow, and at last reddish; and of an indifferent good taste.

The second kind of small cedar groweth not high; but remaineth small and low, like the other; the leaves of this are not prickly, but somewhat round and mossy at the ends, almost like the leaves of tamarisk and savin; the fruit of this kind beareth also round berries, which at first are green, afterwards yellow, and, when they are ripe, they become reddish, and are bitter in taste.

**PLACE.** The great cedar groweth in Africa and Syria, and upon the mountains of Libanus, Amanus, and Taurus.

The second kind groweth in Phœnicia, and in certain places of Italy, in Calabria, and also in Languedoc.

The third kind groweth in Lycia; and is found in certain parts of France, as in Provence and Languedoc.

**TIME.** The great cedar perfecteth its fruit in two years; and it is never without fruit, which is ripe at the beginning of winter. The small cedar-trees are always green, and loaded with fruit, having at all times upon them fruit both ripe and unripe, as hath juniper.

**GOVERNMENT AND VIRTUES.** The great cedar is under the dominion of the Sun, the smaller of Mars; the cedar is hot and dry in the third degree; the rosin, or *liquor cedria*, which runneth forth of the great cedar-tree, is hot and dry almost in the fourth degree, and of subtle parts.

The fruit of the small cedar is also hot and dry, but more moderately; *cedria*, that is, the liquor or gum of cedar, assuageth the tooth-ach, being put into the hollowness of the same; also, it cleareth the sight, and taketh away spots and scars of the eyes, being laid thereon; the same dropped into the ears, with vinegar, killeth the worms.

worms of the same ; and, with the wine of the decoction of hyssop, it cureth the noise and ringing in the ears, and makes the hearing good.

The ancient Egyptians did use, in times past, to preserve their dead bodies with this *cedria*; for it keepeth the same whole, and preserveth them from corruption, but it consumeth and corrupteth living flesh ; it killeth lice, moths, worms, and all such vermin, so that they will not come near it.

The fruit of the cedar is good to be eaten against the strangury ; it provokes urine, and brings down women's courses.

### C I S T U S. CISTUS. LEDUM.

KINDS AND NAMES. OF this there are two sorts : the first called rock-rose, and *cistus non ladanifera*, because it beareth no ladanum ; the other is called marsh-cistus, a plant of a woody substance, upon which is found that fat liquor, or gum, called ladanum.

The first kind, which yieldeth no ladanum, is also of two sorts, viz. male and female. The male beareth red flowers, the female white ; in all things else the one is like the other ; out of the root of the female cistus is drawn forth a sap or liquor called *hypocistis*.

The second kind of cistus is called *ledum* and *ladum* ; the fat liquor which is gathered from it is called *ladanum*, and in shops *lapdanum*.

DESCRIPTION. The first kind of cistus, or *rock-rose*, hath round hairy stalks, and stems with knotted joints, and full of branches ; the leaves are roundish, and covered with a cotton of soft hair, not much unlike the leaves of sage, but shorter and rounder ; the flowers grow at the tops of the stalks, of the fashion of a single rose, whereof the male kind is of a colour red, and the female white ; at the last they change into knops, or husks, wherein the seed is contained.

There is found a certain excrescence or out-growing, about the root of this plant, which is of colour sometimes yellow, sometimes white, and sometimes green ; out of which is artificially drawn a certain juice, which in shops is called *hypocistis*, and is used in medicine.

The second kind of cistus, or *marsh-cistus*, is a plant of a woody substance, growing like a little tree or shrub, with soft leaves, in figure not much unlike the other, but longer and browner ; upon the leaves of this plant is found that fat substance called ladanum, which is generally about midsummer and the hottest days.

PLACE. The first kind of cistus groweth in Italy, Sicily, Candia, Cyprus, Languedoc, and other hot countries, in rough and untilled places. The second kind groweth also in Crete, Cyprus, and Languedoc.

TIME. The first kind of cistus flowereth in June, and sometimes sooner.

The

The seconde kind of cistus flowereth and bringeth forth seed in spring-time ; and immediately after the leaves fall off, and about midsummer new leaves rises up ; upon which leaves, in the hottest days, is found a certain fatnes, which is diligently gathered and dried, and makes that gum which is called lapdanum.

**GOVERNMENT AND VIRTUES.** These plants are governed by Jupiter. The flowers and leaves of cistus are dry in the seconde degree, and foinewhat astringent ; that which groweth about the roots is of like temperature, but more astringent ; lapdanum is hot in the seconde degree almost, and is somewhat dry and astringent. The flowers of cistus, boiled in wine and drunk, stop the lask, and all issues of blood, and dry up superfluous moisture, as well of the stomach as other parts of the belly ; the leaves do cure and heal green wounds, being laid thereupon. Hypocistus stoppeth all fluxes of the belly, and is of a stronger operation than the flowers and leaves of cistus ; wherefore it cureth the bloody flux, and immoderate overflowing of women's courses. Lapdanum drunk with old wine stoppeth the lask and provoketh urine ; it is very good against the hardnes of the matrix, or mother, ufed in manner of a pessary ; it draweth down the secundine or after-birth, when it is laid upon quick coals, and the fumigation or smoke thereof received up into the matrix ; the fame applied to the head with myrrh, or oil of myrrh, cureth the scurf thereof, and keepeth the hair from falling off ; if it be dropped into the ears, with honeyed water or oil of roses, it healeth pains in the ears. It taketh away the scars of wounds, being applied thereunto with wine ; it is also very profitable mixed with all unghents and plasters that serve to heat, moisten, and assuage pains ; and for such as are laid to the breast against the cough.

### C O C K L E. AGROSTEMMA.

**NAMES.** IT is called also nigel-weed, and field nigella.

**DESCRIPTION.** It hath straight, slender, hairy, stems ; the leaves are long, narrow, hairy, and greyish ; the flowers are of a brown-purple colour, changing towards red, divided into five small leaves, not much differing from the proportion of wild campions ; after which there grow round cups, wherein is contained plenty of seed, of a black-brown colour.

**PLACE.** It is too frequent amongst wheat, rye, and barley.

**TIME.** It flowers in May, June, July.

**GOVERNMENT AND VIRTUES.** This unprofitable guest among corn is of a Saturnine quality, causeth giddiness of the head, and stupifies if it gets amongst the corn to be made with it into bread ; and, howsoever taken, it is dangerous and hurtful ; although some ignorant persons have mistaken it for the right nigella, or used it instead of yuray, or darnel, to the great danger of the patient.

## C O R I A N D E R. CORIANDRUM.

**NAMES.** IT is called in shops coriandrum, in English coriander, and in some counties colyander.

**DESCRIPTION.** This is a stinking plant; it beareth a round stalk, full of branches, each about a foot and a half long; the leaves are whitish, all jagged and cut; the under leaves, that spring up first, are almost like the leaves of chervil or parsley, and the upper leaves are not much unlike the same, or rather like to sumitory-leaves, but a great deal tenderer, and more jagged; the flowers are white, and grow in round tufts; the seed is all round, and hollow within, and of a very pleasant scent when it is dry; the root is hard, and of a woody substance.

**PLACE.** It is sown in gardens, and loveth a good soil.

**TIME.** It flowereth in July and August, and the seed is ripe shortly after.

**GOVERNMENT AND VIRTUES.** The green plant is cold and dry, of a Saturnine quality, hurtful to the body; but the sweet-savouring seed is of a warm temperature, and useful for many purposes; the seed of coriander, being prepared, and taken alone or covered with sugar, after meals, closeth up the mouth of the stomach, stayeth vomiting, and helpeth digestion; the same roasted or parched, and drunk in wine, killeth and bringeth forth worms out of the body, and stoppeth the lask and bloody flux, and all other extraordinary issues of blood. Coriander ought not to be covered with sugar, or be put into any meat or medicine, nor used any way unprepared. The way of preparing it is after this manner, viz. Take of the seed of coriander well dried, and pour thereupon good strong wine and vinegar mixed together, and so leave them to steep for the space of four-and-twenty hours; then take the seeds out of the liquor, and dry them, and so keep them to be used in medicine. The green herb coriander, being boiled with crumbs of white bread, or barley-meal, consumeth and driveth away hot humours, swellings, and inflammations; and with bean-meal it dissolveth the king's evil, hard knobs, &c. The juice applied with ceruse, litharge of silver, vinegar, and oil of roses, cureth St. Anthony's fire, and affuageth and easeth the pains of all inflammations.

## C O L O Q U I N T I D A. CUCUMIS.

**NAME.** IT is also called wild bitter-gourd, and the fruit coloquint-apple;

**DESCRIPTION.** Coloquintida creepeth with its branches along by the ground, with rough hairy leaves, of a greyish colour, much cloven or cut; the flowers are bleak or pale; the fruit round, of a green colour at the beginning, and afterwards yellow; the bark thereof is neither thick nor hard, the inner part of the pulp is open

and spongy, full of grey feed, in taste very bitter; the which is dried and kept for medicinal use.

PLACE. Coloquintida groweth in Italy and Spain, from which places the dried fruit is brought unto us.

TIME. Coloquintida bringeth forth its fruit in September:

NATURE AND VIRTUES. It is under the planetary influence of Mars; of temperature hot and dry in the third degree; the white or inward pith or pulp of the apple, taken about the weight of a scruple, openeth the belly mightily, and purgeth gross phlegm and choleric humours, and cleanseth the guts of slimy filthiness and stinking corruption, which oftentimes stick about them, and cause those grievous pains, gripings, and rumbling, of the belly; but, if taken in too great a quantity, it causeth blood to come forth. The like virtue it hath if it be boiled, or laid to soak in honeyed water, or any other liquor, and afterwards given to be drunk; it profiteth much against cold dangerous sicknesses; giddiness of the head, pain to fetch breath, the cholic, looseness of the sinews, and places out of joint; for all the same purposes, it may be put into clysters and suppositories for the fundament; the oil wherein coloquintida hath been boiled, being dropped into the ears, easeth the pain and singeing thereof.

Coloquintida, if administered by an unskilful hand, is very dangerous and hurtful to the stomach and liver, and troubleth the bowels and entrails; for a remedy, you must put to the pulp or pith of coloquintida, gum-tragacanth and mastic, and after make it into troches or balls with honey.

### C O R N E L-T R E E. CORNUS.

NAMES. IT is called of some, long cherry, or long cherry-tree.

DESCRIPTION. The cornel-tree sometimes groweth up to a reasonable bigness, like other trees; and sometimes it is but low, and groweth like to a shrub or hedge-bush, as divers other small trees do; the wood or timber of this tree is very hard; the flowers are of a faint yellowish colour; the fruit is very red, and somewhat long, almost like an olive, but smaller, with a long little stone or kernel inclosed therein like the stone of an olive-berry.

PLACE. The cornel-tree is in this country to be found no where but in gardens and orchards where it is planted.

GOVERNMENT AND VIRTUES. It cureth the falling sickness, and gripings in the belly or bowels; it expelleth wind from the stomach and entrails, helpeth such as are bruised or broken by falls, &c. those that have loose or weak sinews and pains of the sciatica or hip-gout; and used with vinegar it is good against scabs. and is an ingredient in many of our compositions and cordial antidotes.

CAROB-

## CAROB-TREE. CERATONIA.

**NAMES.** IT is called in shops, *xylocaracta*, carob, and carobs.

**DESCRIPTION.** This fruit groweth upon a great tree, whose branches are small and covered with a red bark; the leaves are long, and spread abroad after the manner of ashen-leaves, consisting of six or seven small leaves growing by a rib, one against another, of a sad dark-green colour above, and of a light-green underneath; the fruit is in certain crooked cods or husks, sometimes a foot and a half long, and as broad as one's thumb; sweet in taste; in the husks is contained seed, which is large, plain, and of a chesnut-colour.

**PLACE.** This plant grows in Spain, Italy, and other hot countries.

**GOVERNMENT AND VIRTUES.** The fruit of the carob-tree is somewhat hot and dry, and astringent, especially when it is fresh and green; somewhat subject to the influence of Saturn. The fresh and green carobs do gently loosen the belly, but are somewhat hard of digestion, and, if eaten in great quantity, hurtful to the stomach; but, being dried, they stop fluxes of the belly, provoke urine, and are not prejudicial to the stomach; being much better to be eaten dry than when fresh gathered or green.

## CASSIA-FISTULA. OSYRIS.

**NAMES.** IT is called cassia in the cane, but is usually known by the general name of cassia-fistula in most countries.

**DESCRIPTION.** The tree which beareth the canes hath leaves not much unlike those of the ash-tree; they are great, long, and spread abroad; made of many leaves growing one against another, along by one stem; the fruit is round, long, black, and with woodish husks or cods, most commonly two feet long, and as thick as one's thumb; severed or parted in the inside into divers small cells or chambers, wherein lieth flat and brownish seed, laid together with the pulp, which is black, soft, and sweet, and is called the flour, marrow, or cream, of cassia, and is very useful and profitable in medicine.

**PLACE.** It groweth in Syria, Arabia, and the East Indies; and in the West, as Jamaica.

**GOVERNMENT AND VIRTUES.** The black pulp, or moist substance, of cassia, is of a gentle temperature, moderately hot and moist in the first degree, and under the government of Venus; the inner pulp of cassia is a sweet and pleasant medicine, and may safely be given to all weak people, women with child, and young children. It looseneth the belly gently, and moderately purgeth choleric humours and slimy phlegm gathered about the lungs, to be taken the quantity of an ounce at a time.

Cassia

Cassia is excellent good for those who are troubled with hot agues, the pleurisy, jaundice, or any inflammations of the liver; especially being mixed with waters, drinks, or herbs, that are of a cooling nature. It is good to cleanse the reins and kidneys; it driveth forth gravel and the stone, and is a preservative against the stone if drunk in the decoction of liquorice, and parsley-roots, or ciches. It is good to gargle with cassia, to assuage and mitigate swellings of the throat, and to dissolve, ripen, and break, imposthumes and tumours.

Avicen writeth, that cassia, being applied to the part grieved with the gout, assuageth the pain.

#### C O R A L . I S I S .

K I N D S A N D N A M E S . THERE are several kinds of coral; but the red and the white, especially the red, is most in use. There are also several sorts of black coral, called *antipathes*; and there is a kind of coral which is rough and bristly, and is called *gorgonia*.

D E S C R I P T I O N . These plants, although their hard substance makes them seem rather to be stones, yet they are vegetables.\* The great red coral, which is the best, groweth upon rocks in the sea, like unto a shrub, with arms and branches, which shoot forth into sprigs, some large and some small, of a pale red colour for the most part, when taken out of the water, but when polished it is very beautiful.

#### D A I S I E S . B E L L I S .

T H E S E are so well known to almost every child, that I suppose it is altogether needless to write any description of them.

G O V E R N M E N T A N D V I R T U E S . The herb is under the sign Cancer; and under the dominion of Venus; and therefore excellent good for wounds in the breast, and very fitting to be kept both in oils, ointment, and plasters; as also in syrup. The greater wild daisy is a wound-herb of good respect, often used in those drinks or salves that are for wounds, either inward or outward; the juice or distilled water of these, or the small daisies, doth much temper the heat of choler, and refresheth the liver and other inward parts. A decoction made of them, and drunk, helpeth to cure the wounds made in the hollowness of the breast; the same also cureth all ulcers and pustules in the mouth or tongue, or in the secret parts. The leaves bruised and applied to the testicles, or to any other parts that are swollen and hot, do dissolve the swell-

\* Since the time of Culpeper it has been discovered, that all the corals are inhabited and formed by worms; and in the Linnæan System they belong to the class Vermes, order Zoophyta. See my Nat. Hist. vol. xiii. p. 599. now publishing in numbers. See also the Encyclopædia Londinensis, article CORAL, vol. v. p. 187.

ling and temper the heat. A decoction made thereof with wallwort and agrimony, and the places fomented or bathed therewith warm, giveth great ease to those who are troubled with the palsey, sciatica, or gout; the same also disperseth and dissolveth the knots or kernels that grow in the flesh of any part of the body, and the bruises and hurts that come by falls and blows; they are also used for ruptures and other inward burnings, with very good success. An ointment made hereof doth wonderfully help all wounds that have inflammations about them, or, by reason of moist humours having access unto them, are kept long from healing; and such are those, for the most part, that happen to the joints of the arms and legs. The juice of them, dropped into the running eyes of any, doth much help them.

### D A N D E L I O N. LEONTODON.

VULGARLY called piss-a-beds.

DESCRIPTION. It is well known to have many long and deeply-gashed leaves lying on the ground, round about the head of the root; the ends of each gash or jag on both fides looking downwards towards the root, the middle rib being white, which, broken, yieldeth abundance of bitter milk, but the root much more. From among the leaves, which always abide green, arise many slender, weak, naked, footstalks, every one of them bearing at the top one large yellow flower, consisting of many rows of yellow leaves, broad at the points, and nicked in, with a deep spot of yellow in the middle; which, growing ripe, the green husk wherein the flower stood turneth itself down to the stalk, and the head of down becometh as round as a ball, with long reddish seed underneath, bearing a part of the down on the head of every one, which together is blown away with the wind, or may at once be blown away with one's mouth. The root groweth downwards exceeding deep, which, being broken off within the ground, will notwithstanding shoot forth again; and will hardly be destroyed when it hath once taken deep root in the ground.

PLACE. It groweth frequent in all meadow and pasture grounds.

TIME. It flowereth in one place or other almost all the year long.

GOVERNMENT AND VIRTUES. It is under the dominion of Venus. It is of an opening and cleansing quality, and therefore very effectual for the obstructions of the liver, gall, and spleen, and the diseases that arise from them, as the jaundice and hypochondriacal passion. It wonderfully openeth the passages of urine, both in young and old; it powerfully cleanseth apostumes, and inward tumours in the urinary passages, and by the drying and temperate quality doth afterwards heal them; for which purpose the decoction of the roots or leaves in white wine, or the leaves chopped as pot-herbs with a few alisanders, and boiled in their broth, is very effectual.

fectual. And whoever is drawing towards consumption, or an evil disposition of the whole body, called *cacheria*, by the use thereof for some time together will find a wonderful help. It helpeth also to procure rest and sleep to bodies distempered by the heat of ague-fits, or otherwise; the distilled water is effectual to drink in pestilential fevers, and to wash the sores.

You see here what virtues this common herb hath, and that is the reason the French and Dutch so often eat it in the spring; and now, if you look a little farther, you may plainly perceive that foreign physicians are more liberal in communicating their knowledge of the virtues of plants than the English.

#### D A R N E L. L O L I U M.

IT is also called *juray* and *wray*; in Sufex, they call it *crop*, being a pestilent enemy among corn.

**D E S C R I P T I O N.** This hath, all the winter long, sundry long, fat, and rough, leaves, which, when the stalk rifeth, which is slender and jointed, are narrow, but still rough. On the top groweth a long spike, composed of many heads, set one above another, containing two or three husks, with sharp but short beards or awns at the ends; the seed is easily shaken out of the ears, the husk itself being somewhat tough.

**P L A C E.** The country husbandmen know this too well to grow among their corn, or in the borders or pathways of other fields that are fallow.

**G O V E R N M E N T A N D V I R T U E S.** It is a malicious plant of fallen Saturn. As it is not without some vices, so hath it also many virtues. The meal of darnel is very good to stay gangrenes, and other such-like fretting and eating cankers, and putrid sores; it also cleanseth the skin of all leprosies, morphews, ringworms, and the like, if it be used with salt and raddish-roots. Being used with quick brimstone and vinegar, it dissolveth knots and kernels, and breaketh those that are hard to be dissolved, being boiled in wine with pigeon's dung and linseed; a decoction thereof made with water and honey, and the place bathed therewith, is profitable for the sciatica. Darnel-meal applied in a poultice draweth forth splinters and broken bones from the flesh; the red darnel boiled in red wine, and taken, stayeth the lach and all other fluxes, and women's bloody issues; and restraineth urine that paseth away too suddenly.

#### D I L L. A N E T H U M.

**D E S C R I P T I O N.** The common dill groweth up with seldom more than one stalk, neither so high, nor so great usually, as fennel, being round, and with fewer joints thereon; whose leaves are fadder, and somewhat long, and so like fennel that it de-

cciveth

ceiveth many, but harder in handling, and somewhat thicker, and of a stronger unpleasant smell; the tops of the stalks have four branches, and smaller umbels of yellow flowers, which turn into small seed somewhat flatter and thinner than fennel-seed. The root is somewhat small and woody, perishing every year after it hath borne seed; and it is also unprofitable, being never put to any use.

PLACE. It is most usually sown in gardens, and grounds for that purpose; and is also found wild with us in some places.

GOVERNMENT AND VIRTUES. Mercury hath the dominion of the plant, and therefore to be sure it strengthens the brain. The dill being boiled, and drunk, is good to ease swellings and pains; it also stayeth the belly and stomach from casting; and the decoction thereof helpeth women that are troubled with the pains and windiness of the mother, if they fit therein. It stayeth the hiccough, being boiled in wine, and only smelled unto, being tied in a cloth. The seed is of more use than the leaves, and more effectual to digest raw and viscous humours, and is used in medicines that serve to expel wind, and the pains proceeding therefrom. The seed being toasted or fried, and used in oils and plasters, dissolveth imposthumes in the fundament, and drieth up all moist ulcers, especially in the secret parts. The oil made of dill is effectual to warm, to dissolve humours in general, to ease pains, and to procure rest. The decoction of dill, be it herb or seed, (only if you boil the seed you must bruise it,) in white wine, being drunk, is an excellent remedy to expel wind, and also to provoke the terms.

#### D E V I L's B I T. SCABIOSA.

DESCRIPTION. THIS riseth up with a round, green, smooth, stalk, about two feet high, set with divers long and somewhat narrow, smooth, dark-green, leaves, somewhat snipt about the edges for the most part; being else all whole, and not divided at all, or but very seldom, even to the tops of the branches, which yet are smaller than those below, with one rib only in the middle. At the end of each branch standeth a round head of many flowers set together in the same manner, or more neatly than the scabious, and of a more bluish purple colour; which, being past, there followeth seed that falleth away. The root is somewhat thick, but short and blackish, with many strings, abiding after seed-time many years. There are two other sorts hereof, in nothing unlike the former, save that one beareth white, and the other bluish-coloured flowers.

PLACE. The first groweth as well in dry meadows and fields as moist, in many places of this land; but the other two are more rare and hard to meet with; yet are both found growing wild about Appledore, near Rye, in Kent.

TIME.

TIME. They flower usually about August, and the seed is ripe in September.

GOVERNMENT AND VIRTUES. The plant is venereal, pleasing, and harmless. The herb or root, being boiled in wine and drunk, is very powerful against the plague, and all pestilential diseases or fevers, poisons also; and the biting of venomous beasts; it also helpeth those that are inwardly bruised by any casualty, or outwardly by falls or blows, dissolving the clotted blood; and the herb or root beaten and outwardly applied, taketh away the black and blue marks that remain in the skin. The decoction of the herb, with honey of roses put therein, is very effectual to help the inveterate tumours and swellings of the almonds and throat, by often gargling the mouth therewith. It helpeth also to procure women's courses, and easeth all pains of the mother, and to break and discuss wind therein, and in the bowels. The powder of the root taken in drink, driveth forth the worms in the body. The juice or distilled water of the herb is effectual for green wounds or old sores, and cleanseth the body inwardly, and the seed outwardly, from sores, scurf, itch, pimples, freckles, morphew, especially if a little vitriol be dissolved therein.

### D O C K . R U M E X .

MANY kinds of these are so well known, that I shall not trouble you with a description of them.

GOVERNMENT AND VIRTUES. All docks are under Jupiter; of which the red dock, commonly called bloodwort, cleanseth the blood and strengthens the liver; but the yellow dock root is best to be taken when either the blood or liver is afflicted by choler. All of them have a kind of cooling (but not alike) drying quality, the forreks being most cold, and the bloodworts most drying; of the burdock I have spoken already by itself; see p. 101. The seed of most of the kinds, whether of the garden or field, doth stay lasks or fluxes of all sorts, the loathings of the stomach through choler, and is helpful to those who spit blood. The root, boiled in vinegar, helpeth the itch, scabs, and breaking-out of the skin, if it be bathed therewith. The distilled water of the herb and roots hath the same virtue, and cleanseth the skin of freckles, morphews, and all other spots and discolourings therein.

All docks, being boiled with meat, make it boil the sooner; besides, bloodwort is exceedingly strengthening to the liver, and procures good blood, being as wholesome a pot-herb as any that grows in a garden.

### D O D D E R O R T H Y M E . C U S C U T A .

CALLED also epithimum.

DESCRIPTION. This first from seed giveth roots in the ground, which shoot forth threads or strings, groffer or finer according to the property of the plant where-

to it belongeth, as also the climate; creeping and spreading on whatever it happens to fasten. These strings have no leaves at all upon them, but wind and entwine themselves so thick, that it not only taketh away all comfort of the sun, but is ready to choke or strangle whatever plant it chances to cleave to. After these strings are risen to such a height that they may draw nourishment from the plant, they seem to be broken off from the ground, either by the strength of their rising, or withered by the heat of the sun; upon these strings are found clusters of small heads or husks, out of which come whitish flowers, which afterwards give small pale-coloured seed, somewhat flat, and twice as big as poppy-seed. It generally participates of the nature of the plant which it climbeth upon; but the dodder of thyme is accounted the best, and is the only true epithimum.

**GOVERNMENT AND VIRTUES.** All dodders are under Saturn. The dodder which grows upon thyme is generally much hotter than that which grows upon colder herbs, for it draws nourishment from what it grows upon, as well as from the earth where its root is. This is accounted the most effectual for melancholic diseases, and to purge black or burnt choler, which is the cause of many diseases of the head and brain; as also for the trembling of the heart, faintings, and swoonings; and is helpful in all diseases and griefs of the spleen; and that of melancholy, arising from the windiness of the hypochondria. It purgeth also the reins or kidneys by urine: it openeth the obstructions of the gall, whereby it profiteth those who have the jaundice, as also the liver and spleen; it purgeth the veins of choleric and phlegmatic humours, and helpeth children's agues, a little wormseed being put thereto.

The other dodders (as I observed before) participate of the nature of those plants whereon they grow, as that which hath been found growing upon nettles in the west country hath by experience been found very effectual to procure plenty of urine, when it hath been stopped or hindered; and so of the rest.

#### D O G's G R A S S. TRITICUM.

KNOWN also by the name of quich-graſs, or couch-graſs.

**DESCRIPTION.** It is well known that this graſs creepeth far about under ground, with long, white, jointed, roots, having ſmall fibres at each joint, very ſweet in taste, as the rest of the herb is, and interlacing one another; from whence ſhoot forth many fair long graſſy leaves, ſmall at the ends, and cutting or sharp on the edges. The ſtalks are joined like corn, with the leaves on them, and a long ſpiked head with a long huſk containing hard and rough ſeed. If you know it not by this deſcription, watch a dog when he is ſick, and he will quickly lead you to it; for dogs have ſuch an inſiňt, that they will find out this herb to cure themſelves.

PLACE.

**PLACE.** It groweth commonly in this kingdom, particularly in ploughed ground, being very troublesome both to husbandmen and gardeners to weed out of their grounds.

**GOVERNMENT AND VIRTUES.** It is a gentle remedy under the dominion of Jupiter; and is the most medicinal of all the quich-glasses; being boiled and drunk, it openeth obstructions of the liver and gall, and the stopping of the urine, and easeth the griping pains of the belly, and inflammations; wasteth the matter of the stone in the bladder, and also the ulcers thereof. The roots, bruised and applied, do consolidate wounds. The seed doth most powerfully expel urine, and stayeth the lask and vomiting. The distilled water alone, or with a little worm-seed, killeth worms in children.

The method of using it, is to bruise the roots, and, having well boiled them in white wine, drink the decoction: it is opening; but not very safe in purging: and it is a remedy against all diseases arising from stoppages of the body.

#### D O V E's. F O O T. G E R A N I U M.

CALLED also crane's bill.

**DESCRIPTION.** This hath divers small round pale-green leaves, cut in about the edges, much like mallows, standing upon long reddish hairy stalks, lying in a round compass upon the ground; among which rise up two or three, or more, reddish, jointed, slender, weak, and hairy, stalks, with some such-like leaves thereon, but smaller, and deeper cut toward the tops, where grow many very small bright-red flowers of five leaves each; after which come finall heads, with small short beaks pointing forth, as all the other sorts of these herbs do.

**PLACE.** It groweth in pasture-grounds, and by the path-sides in many places, and is sometimes found growing in gardens.

**TIME.** It flowereth in June, July, and August, sometimes earlier and sometimes later, and the seed is ripe quickly after.

**GOVERNMENT AND VIRTUES.** It is a very gentle, though martial, plant. It has been found by experience to be singularly good for the wind-cholic, and pains thereof; as also to expel the stone and gravel in the kidneys. The decoction thereof in wine is an excellent good wound-drink for those who have inward wounds, hurts, or bruises, both to stay the bleeding, to dissolve and expel the congealed blood, and to heal the parts; as also to cleanse and heal outward sores, ulcers, and fistulas; green wounds are likewise quickly healed by bruising the herb, and applying it to the part affected. The same decoction in wine, fomented to any place pained with the gout, or to any joint-achs or pain of the sinews, giveth great ease. The powder or decoction of the herb taken for some time together, will prove exceedingly

exceedingly efficacious in the cure of ruptures and burstings, either in young or old.

### D U C K's M E A T. LEMNA.

THIS is so well known to swim at the top of standing-waters, as ponds, pools, ditches, &c. that it is needless further to describe it.

**GOVERNMENT AND VIRTUES.** Cancer claims the herb, and the Moon is the lady of it. It is effectual to help inflammations and St. Anthony's fire, as also the gout, either applied by itself, or in a poultice with barley-meal. The distilled water hereof is held in high estimation for its virtues against all inward inflammations and pestilential fevers; as also to help the redness of the eyes, the swellings of the scrotum, and of the breasts, before they are grown too much. The fresh herb, applied to the forehead, easeth the pains of the head-ach coming of heat.

### DOWN, OR COTTON-THISTLE. CARDUUS.

**DESCRIPTION.** THIS hath many large leaves lying on the ground, somewhat cut in, and as it were crumpled on the edges, of a green colour on the upper side, but covered with long hairy wool, or cottony down, set with very sharp and piercing prickles; from the middle of its heads of flowers come forth many purplish or crimson threads, and sometimes (though but very seldom) white ones. The seed that followeth in the heads, lying in a great deal of fine white down, is somewhat large, long, and round, like the seed of lady's-thistle, but somewhat paler. The root is large and thick, spreading much, and usually dies after seed-time.

**PLACE.** It groweth on divers ditches, banks, and in corn-fields, and highways, in almost every part of this kingdom.

**TIME.** It flowereth and beareth seed about the end of summer, at the time of the flowering and seeding of other thistles.

**GOVERNMENT AND VIRTUES.** Mars owns this plant. Pliny and Dioscorides write, that the leaves and roots hereof, taken in drink, help those who have a crick in the neck; Galen saith, that the root and leaves of this plant are of an heating quality, and good for such persons as have their bodies drawn together by spasms or convulsions; as also for children that have the rickets.

### D R A G O N S. ARUM.

THEY are so well known in this kingdom, that they require no description; though we may just observe, for the benefit of such as are not perfectly acquainted with this plant, that they cannot mistake it if they take notice of the root, which very much resembles a snake.

**GOVERNMENT AND VIRTUES.** This plant is under the dominion of Mars, and is not without its obnoxious qualities. To use herbs of this description, the safest way is to press out the juice, and distil it in a glass still in sand; it scourseth and cleanseth the internal as well as external parts of the body exceedingly; it cleanseth the skin from freckles, morphew, and sun-burnings; the best way to use it externally is to mix it with vinegar: an ointment of it is very good to heal wounds and ulcers; it consumes cankers, and that flesh growing in the nostrils called polypus. The distilled water being dropped into the eyes, takes away spots and blemishes, as also the pin and web, and cures dimness of sight; it is excellent good against pestilence and poison. Pliny and Dioscorides affirm, that no serpent will approach any person carrying this herb about them.

#### DUNCH-DOWN. *TYPHA.*

**NAMES.** IT is called dunch-down, because, if the down thereof happens to get into the ears, it causeth deafness. It is called in Latin *Typha palustris*, in English, reed-mace and water-torch; the leaves of it are called mat-weed, because mats are made therewith.

**DESCRIPTION.** This herb hath long, rough, thick, and almost three-square, leaves, filled within with a soft pith or marrow; among the leaves sometimes groweth up a long, smooth, naked, stalk, without knots or joints, not hollow within, having at the top a grey or rufset long knap or ear, which is round, soft, thick, and smooth, and seemeth to be nothing else but a thrum of rufset wool or flocks, set thick, and thronged together; which, as it ripeneth, is turned into down, and carried away with the wind. This down or cotton is so fine, that in some countries they fill cushions and beds with it. The roots are hard, thick, and white, with many threads hanging athwart each other; and, when these roots are dry, they serve for little else than firing.

#### DWARF PLANE-TREE. *PLATANUS.*

IN Latin this tree is called *Platanus orientalis vera*.

**GOVERNMENT AND VIRTUES.** The tender leaves boiled in wine; and used in the manner of an ointment, stop fluxions of the eyes; the bark boiled in vinegar is used for pains of the teeth; but its use in physic is now become obsolete.

#### DOUBLE-TONGUE. *Ruscus.*

**KINDS AND NAMES.** THERE are found two kinds hereof; it is called double-tongue, horse-tongue, and laurel of Alexandria.

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DESCRIPTION.

**DESCRIPTION.** Double-tongue hath round stalks, like those of Solomon's seal, about a foot and a half high, upon each side whereof grow thick brownish leaves, not much unlike bay-leaves, upon which there groweth, in the middle of every leaf, another small leaf, fashioned like a tongue; and betwixt the small and large leaves there grow round red berries, as big as a pea; the root is tender, white, long, and of a pleasant smell.

There is also another kind of double-tongue, which also bringeth forth its fruit upon the leaves, and is like the first in stalks, leaves, fruit, and roots, except that the great leaves and berries grow alone, without the addition of the small leaf.

**PLACE.** It groweth in Hungary, and Austria, and in the woods and forests in Italy; but is scarcely ever seen in England, unless planted for curiosity.

**TIME.** The seed of this herb is generally ripe in September.

**GOVERNMENT AND VIRTUES.** Double-tongue is an herb of Venus. The leaves and roots thereof are much esteemed for assuaging swellings of the throat, uvula, and kernels under the tongue; as also against the ulcers and sores of the same, being taken as a gargle. Marcellus observes, that in Italy they hang this herb about children's necks that are sick in the uvula; and Dioscorides affirms, that, if it be worn upon the bare head, it is good for the head-ach. This herb is good for the diseases of the mother, and a spoonful of the decoction of the leaves taken causeth the strangled matrix to descend down to its natural place.

The root of laurel of Alexandria, boiled in wine and drunk, helpeth the strangury, provoketh the urine and women's natural sickness, procures easy delivery, expelleth the secundine, and all corruptions of the matrix.

#### WHITE DAFFODIL. NARCISSUS.

**NAMES.** IT is called narcissus, and primrose-pearls.

**KINDS.** There are several kinds hereof: one with a crimson or red purple circle in the middle of the flower; another having a yellow circle, resembling a coronet, or cup, in the middle of the flower; there is another kind that is yellow in the middle, and another sort which beareth double flowers.

**DESCRIPTION.** The first kind of daffodil, or narcissus, hath small narrow leaves like leek-blades, with a crested, bare, naked, stalk, without leaves, of a foot or nine inches long, with a flower at the top, growing out of a film or skin, generally singly, or alone, though sometimes two together, consisting of six little white leaves; in the middle whereof is a small round wrinkled hoop or cup, bordered about the brim with a certain round edge, wherein are contained several small threads or stems, with yellowish tips hanging thereon; after the flowers

appear

appear angled husks, wherein grow black seeds; the root is round and bulbous, not much unlike an onion.

The other narcissus, with the yellow cup or circle in the middle, has blades longer and broader, and not so green as those of the first; the stalks are longer and thicker, and upon every one of them standeth three or four flowers like unto the first, except that they are yellow in the middle.

There is another kind that is yellow in the middle, and bears many more flowers, which are smaller than those before described.

PLACE. The two first kinds grow plentifully in many places of France, as Burgundy, Languedoc, &c. in meadows and pastures; but in this country they grow only in gardens where they are planted.

TIME. They flower chiefly in March and April, though some of them bloom not until the beginning of May.

TEMPERATURE AND VIRTUES. Venus challengeth the dominion over these plants. The root of it is hot and dry in the third degree; the which root, being boiled or roasted, or taken in meat or drink, provoketh the stomach to vomiting; the same pounded with a little honey is good to be applied to burnings or scaldings, and cureth sinews that are hurt or sprained, and is good to help dislocations, or members out of joint, being applied thereto; it also giveth ease in all old griefs and pains of the joints. The roots of narcissus take away all spots of the face, being mingled with nettle-seed and vinegar, and applied. It mundifieth and cleanseth corrupt and rotten ulcers, and ripeneth and breaketh hard imposthumes, if it be mixed with the meal of vetches and honey, and used in the manner of a poultice; and, being mixed with the meal of juray and honey, it draweth forth thorns and splinters.

#### YELLOW DAFFODIL. AMARYLLIS.

NAMES. THIS kind of daffodil is also called *lide-lily*, because it flowereth in March, which month, in some countries, is called *Lide*, and they are likewise known vulgarly by the name of daffydown-dillies.

DESCRIPTION. It hath long, narrow, green, leaves; the stalks are round, upon which grow yellow flowers, of an unpleasant smell; after which come round knobs or husks, like little heads, wherein the seed is contained; it hath abundance of roots, which grow thick together, and increase by new sprigs and blades, whereby it spreadeth and increaseth itself under ground, so that the increase of this plant is very rapid.

PLACE. It doth not grow naturally in this country, but in gardens where it is planted.

TIME.

TIME. Daffodils flower in March and April, and the seed ripens soon after.

GOVERNMENT AND VIRTUES. Yellow daffodils are under the dominion of Mars, and the roots hereof are hot and dry almost in the third degree. The roots boiled and taken in posset-drink, cause vomiting, and are used with good success at the appearance of approaching agues, especially the tertian ague, which is frequently caught in the spring-time. A plaster made of the roots, with parched barley-meal, dissolves hard swellings and imposthumes, being applied thereto; the juice, mingled with honey, frankincense, wine, and myrrh, and dropped into the ears, is good against the corrupt filth and running matter of the ears; the roots, made hollow, and boiled in oil, help raw kibed heals; the juice of the root is good for the morphew, and the discolourings of the skin.

#### DATE-TREE. PHÆNIX.

NAMES. THIS is likewise called palm-tree, and the fruit is called dates, or fruit of the palm-tree.

DESCRIPTION. It groweth to be a large tree, with a straight thick trunk, covered with a scaly bark; at the top whereof grow many long branches, bearing a vast number of long, straight, narrow, leaves, or twigs, like reeds, so that the whole tree appears to be nothing but a bundle of reed-leaves; amongst the branches groweth the fruit, clustering together at the first, and wrapt in a certain long and broad covering, like a pillow, which afterwards openeth, and sheweth the fruit standing along on certain small sprigs, growing out of a flat yellow branch; the fruit is long and round, containing within it a long and hard stone. Of this tree there are two kinds, the male and female; the male tree bringeth forth flowers only, which vanish as soon as the blossom is full; and the female beareth the fruit, and bringeth it to perfection and ripeness.

PLACE. The date-tree groweth in Africa, Arabia, India, Syria, Judea, and other eastern countries.

TIME. It continueth always green, and beareth its flowers in the spring; In hot countries the fruit is ripe in autumn.

GOVERNMENT AND VIRTUES. The branches and leaves are cold and astringent; the fruit is also somewhat astringent, but hot and dry almost in the second degree: especially before it is thoroughly ripe. Dates are hard of digestion, and cause oppilations in the liver and spleen; they engender windiness, head-ach, and gross blood, if eaten green and fresh; but, being quite ripe, they are not so hurtful, but nourish indifferently, being well digested in a good stomach. Dry dates stop looseness, and stay vomiting and sick qualms of the stomach, especially of women with child, if

they

they are eaten; as also mingled with other proper medicines, and applied as a plaster to the stomach. Being administered inwardly, or applied outwardly, with medicines convenient, they strengthen the weakness of the liver and spleen. The leaves and branches are good to heal green wounds, and refresh and cool hot inflammations. There is a direction in the plaster *diacalcitheos*, that it be stirred with a stick of the palm-tree, that it might be of the more virtue and efficacy; from whence also the same plaster is called *diapalma*.

#### DICTAMNUM or CANDY. DICTAMNUS.

KINDS AND NAMES. IT is observed by Dioscorides, that there are three kinds hereof; the first of which is the right *dictamnum*, the second is the bastard *dictamnum*, and the third is another kind, bearing both flowers and seed; it is called also *dittany of Crete*, and in the shops *diptanum*.

DESCRIPTION. The first kind, which is the *right dictamnum*, is a hot and sharp plant, much resembling penny-royal, except that this hath larger leaves, somewhat hoary or mossy, with a certain fine down, or woolly white cotton; at the top of the stalks or branches grow certain small spiky tufts hanging by small stems, greater and thicker than the ears or spiky tufts of wild marjoram, and are somewhat of a red colour, in which there grow small flowers.

The second kind, called *bastard dictamnum*, is very much like the first, except in taste; it does not bite or hurt the tongue, as does the former, neither is it so hot. It hath round, soft, woolly, stalks, with knots and joints, at each of which joints there stand two leaves, somewhat round, soft and woolly, not much unlike the leaves of penny-royal, but that they are larger, all hoary and white, without any smell, but bitter in taste; the flowers are of a light blue, compassing the stalk at certain spaces like garlands, and like the flowers of penny-royal and hoarhound; the root is of a woody substance.

The third kind is like the second in figure, saving that its leaves are greener and more hoary; covered with a fine, white, soft, hair, almost like the leaves of water-mint; the whole plant hath a good and pleasant smell, as it were betwixt the scent of water-mint and sage, as saith Dioscorides.

PLACE. The first kind, or the right *dictamnum*, cometh from Crete, now called Candia, an island in the Mediterranean sea, formerly belonging to the Venetians, but now in possession of the Turks.

The other two kinds are not confined to Candia only, but grow also in many other hot countries.

GOVERNMENT AND VIRTUES. The right *dictamnum* is hot and dry, and of subtil parts; the other two kinds are also hot and dry, but not quite so hot as the

first; they are all under Venus. The right dictamnum is of the same virtue as penny-royal, but much stronger and better. It bringeth down the courses, after-birth, the dead child, either taken in meat or drink, or used as a pessary or mother-suppository. The same virtue hath the root, which is hot and sharp upon the tongue; the juice is very good to be drunk against all venoms, and the bitings of venomous beasts and serpents. Dictamnum is of such force against poison, that the favour or smell thereof driveth away all venomous beasts or serpents; the juice of the same is of singular efficacy against all kinds of wounds, if dropped or poured therein; it both mundifieth, cleanseth, and healeth, the same; it qualifieth and assuageth the pain of the milt and spleen, and wasteth and diminisheth it, being either taken inwardly, or applied outwardly to the place; it draweth forth splinters and thorns, if it be bruised, and laid upon the affected part.

The bastard dictamnum hath the same virtues as the first, though not quite so powerful in its operations.

The third kind is very profitable, compounded with medicines, drinks, and plasters, against the bitings or stings of venomous beasts.

#### FALSE DICTAMNUM. MARRUBIUM.

**NAMES.** This herb is called in Latin *tragium*, and by some *fraxinella*; some apothecaries do use the root thereof instead of the right dictamnum, from whence it is called bastard or false dictamnum.

**DESCRIPTION.** This plant somewhat resembles *lentisca*, or *licoras*, both in leaves and branches; it hath round, blackish, rough, stalks, bearing on the tops thereof fair flowers, of a bluish colour, which on the upper part have four or five leaves, and on the lower part it hath small long threads, crooking or hanging down almost like a beard. After the flowers are gone, in the place of each come four or five cords, somewhat rough without, slippery or slimy in handling, and of a strong smell, not unlike that of a goat; in which is contained a black, plain, shining, seed. The roots are long and white, sometimes as thick as one's finger, and generally grow one against the other.

**PLACE.** It groweth on the Isle of Candia, and is sometimes found in the gardens of curious botanists.

**TIME.** It flowereth in June and July.

**GOVERNMENT AND VIRTUES.** This plant is also under the dominion of Venus. It is hot almost in the third degree, and of subtil parts; the seed, taken to the quantity of a dram, is good against the strangury; it provoketh urine, is good against the stone in the bladder, breaking and bringing it forth, and bringeth down the terms of women; the leaves and juice taken after the same manner have similar virtues, and,

and, being externally applied, draw out thorns and splinters; the root taken with a little rhubarb, killeth and driveth forth worms, and is of singular excellence against their return.

Dioscorides observes of this plant, as also of the former, that it is natural to wild goats, when they are struck with darts or arrows, to eat of this herb, which causeth them to fall out of their bodies; on which account it is not improbable that this herb came first to be substituted for the right dictamnum.

#### ELM-TREE. *ULMUS.*

THIS tree is so well known, growing generally in most counties of this kingdom, that it would be needless to describe it.

**GOVERNMENT AND VIRTUES.** It is a cold and Saturnine plant. The leaves hereof, bruised and applied, heal green wounds, being bound thereon with its own bark; the leaves, or the bark, used with vinegar, effectually cure the scurf and leprosy; the decoction of the leaves, bark, or root, healeth broken bones by bathing the part affected therewith; the water that is found in the bladders on the leaves, while it is fresh, is a good wash for cleansing the skin, and making it fair; and if cloths are often wet therein, and applied to the ruptures of children, it helpeth them, if they are afterwards well bound up with a trus; the said water being close stopped in a glas vessel, and set either into the earth or dung for twenty-five days, setting the bottom thereof on a lay of common salt, so that the fæces may settle, and the water become very clear, is a singular and sovereign balsam for green wounds, being used with soft tents: the decoction of the bark of the root mollifieth hard tumours, and the shrinking of the sinews, being fomented therewith; the roots of the elm boiled for some considerable time in water, the fat rising on the surface being nicely taken off, will prove an excellent restorative of fallen hair, the bald places being with it anointed; the bark ground with brine or pickle, until it cometh to the thickness of a poultice, and laid on the place pained with the gout, giveth great ease; and the decoction of the bark in water is exceeding good to bathe such places as have been burned with fire.

#### ENDIVE. *CICHORIUM.*

**DESCRIPTION.** COMMON garden-endive beareth a longer and larger leaf than succory, and abideth but one year, quickly running up to stalk and seed, and then perishing; it hath blue flowers, and the seed is so much like that of succory, that it is hard to distinguish them.

**GOVERNMENT AND VIRTUES.** It is a fine, cooling, cleansing, plant; the decoction of the leaves, or the juice, or the distilled water, of endive, serveth well to cool.

cool the excessive heat of the liver and stomach, as also the hot fits of agues, and all other inflammations; it cooleth the heat and sharpness of the urine, and the excoriations in the urinary parts: the seeds have the same properties, though rather more powerful, and besides are available for fainting, swoonings, and the passions of the heart. Outwardly applied, they serve to temper the sharp humours of fretting ulcers, hot tumours and swellings, and pestilential sores. It wonderfully helpeth not only the redness and inflammation of the eyes, but the dimness of the sight also; it is likewise used to allay the pains of the gout; in fact, it cannot be used amiss. The syrup of it is a fine cooling medicine for fevers.

#### ELECAMPANE. INULA.

**DESCRIPTION.** THIS shooteth forth many large leaves, long and broad, lying near the ground, small at both ends, somewhat soft in handling, of a whitish green on the upper side, and grey underneath, each set upon a short footstalk; from among these rise up divers great and strong hairy stalks, three or feet high, with some leaves thereon, compassing them about at the lower ends, and are branched toward the tops, bearing several large flowers, like those of the corn-marigold, both the border of the leaves and the middle thumb being yellow; this is followed by a down, with long, small, brownish, seed among it, which is carried away with the wind. The root is large and thick, branching forth many ways, blackish on the outside, and white within, of a very bitter taste, and strong but pleasant smell, especially when they are dried; it is the only part of the plant which has any smell.

**PLACE.** It groweth in moist grounds and shadowy places oftener than in the dry and open borders of fields and lanes, and other waste places, almost in every county in this kingdom.

**TIME.** It flowereth in June and July, and the seed is ripe in August. The roots are gathered for medicinal purposes, as well in the spring, before the leaves come forth, as in autumn or winter.

**GOVERNMENT AND VIRTUES.** It is a plant under the dominion of Mercury. The fresh root of elecampane preserved with sugar, or made into a syrup or conserve, is very good to warm a cold and windy stomach, or the pricking therein, and stitches in the sides, caused by the spleen; also to help a cough, shortness of breath, and wheezing in the lungs. The dry root made into powder, mixed with sugar, and taken, answereth the same purposes, and is also profitable to those who have their urine stopped; likewise to prevent the stoppings of the menstrua, the pains of the mother, and of the stone in the reins, kidneys, or bladder; it resisteth poison, and stayeth the spreading of the venom of serpents, as also of putrid and pestilential fevers; and also the plague. The roots and herbage beaten and put into new ale or beer,

beer, and drunk daily, clear, strengthen, and quicken, the sight of the eyes exceedingly. The decoction of the roots in wine, or the juice taken therein, killeth and driveth forth all manner of worms in the belly and stomach. If gargled in the mouth, or the root chewed, it fasteneth loose teeth, and helpeth to keep them from putrefaction; being drunk, it is good for those who spit blood, helpeth to remove cramps or convulsions, the pains of the gout, the sciatica, the looseness and pains in the joints, or members disjointed or sprained, proceeding from colds or moisture happening to them, applied either internally or externally; it is also used with good effect by those who are burthen, or have an inward bruise. The roots being well boiled in vinegar, afterwards beaten and made into an ointment with hog's suet and oil of trotters, is an excellent remedy for the scab or itch, either in young or old; the places also bathed or washed with the decoction doth the same; and helpeth all sorts of filthy old putrid sores or cankers. In the root of this herb lieth the chief effect for all the remedies aforesaid. The distilled water of the leaves and roots together is very profitable to cleanse the skin from morphew, spots, or blemishes.

#### ERINGO. ERYNGIUM.

KNOWN also by the name of *sea-holly*.

DESCRIPTION. The leaves of this plant are nearly round, deeply dented about the edges, hard, and sharp-pointed, a little crumpled, and of a bluish-green colour, each having a long footstalk; the leaves, when young, are neither so hard nor prickly as when come to maturity. The stalk is round and strong, somewhat crested with joints, bearing leaves thereat, which are more divided, sharp, and prickly than those before mentioned; from these joints it also brancheth forth many ways, each bearing on the top several bluish, round, prickly, heads, with many small jagged, prickly, leaves under them, standing like a star, which are sometimes of a greenish or white colour. The root groweth very long, sometimes to the length of eight or ten feet, set with rings or circles towards the upper part, but smooth and without joints downwards, brownish on the outside, but very white within, with a pith in the middle, of a pleasant taste, but much more so when carefully preserved, and candied with sugar..

PLACE. It is found on the sea-coasts, and in almost every part of this kingdom bordering on the sea.

TIME. It flowereth at the latter end of the summer, and giveth its seed about a month after.

GOVERNMENT AND VIRTUES. The plant is venereal, and produceth a great No. 12. quantity

quantity of seed; it is hot and moist, and under the sign Libra. The decoction of the root taken in wine is very effectual in opening the obstructions of the spleen and liver. It helpeth the yellow jaundice, the dropsy, the pains in the loins, and wind-cholic; provoketh urine, expelleth the stone, and procureth women's courses. The decoction taken for fifteen days, on going to bed and in the morning fasting, helpeth the strangury, the evacuation of the urine by drops, the stopping of urine, the stone, and all defec'ts of the reins and kidneys; and, by a longer continuance of the aforesaid decoction, great relief will be found even against the French disease. The roots bruised, and externally applied, help the kernels of the throat, commonly called the king's evil; or taken inwardly, and applied to the place stung or bitten by a serpent, heal it speedily. If the roots are bruised and boiled in hog's lard, they are good for drawing forth thorns, splinters, &c. and closing the incision made thereby. The juice of the leaves dropped into the ears, helpeth impostumes therein; the distilled water of the whole herb, when the leaves and stalks are young, may be drunk with good success for all the purposes aforesaid.

#### EYEBRIGHT. EUPHRASIA.

**DESCRIPTION.** COMMON eyebright is a small low herb, rising up usually with but one blackish-green stalk, about a span high, spread from the bottom into sundry branches, whereon are set small, and almost round, yet pointed, dark-green leaves; they are finely snipped about the edges, two always set together, and very thick; at the joints with the leaves, from the middle upwards, come forth small white flowers, striped with purple and yellow, after which follow small round heads containing very small seed; the root is long, small, and thready at the end.

**PLACE.** It groweth in meadows and grassy places.

**GOVERNMENT AND VIRTUES.** It is under the sign Virgo, and Sol claims the dominion over it. The juice of this herb, taken in white wine, or broth, or dropped into the eyes for several days together, helpeth all the infirmities of them. Some make a conserve of the flowers for the aforesaid purpose. Being used either of these ways, it also helpeth a weak brain or memory. If tunned up with strong beer, that they may work together, and drunk; or the powder of the dried herb mixed with sugar, a little mace, and fennel-feed, and drunk or taken in broth; or the said powder taken as an electuary;—each of these has the same powerful effect to help and restore the los's of sight through age.\*

\* To the virtues of eyebright we have the recent testimony of Dr. Jackson. See Med. and Phys. Journal for Feb. 1810, containing some very remarkable cases.

## ELDER-TREE. SAMBUCUS.

I CONSIDER it needless to trouble my readers with a description of this tree, since there is scarcely a school-boy but can point it out; shall therefore proceed to the

## DWARF ELDER,

CALLED also *dead-wort* and *wall-wort*; otherwise *Sambucus*.

DESCRIPTION. This herb springeth fresh from the ground every spring; its leaves and stalks perishing at the approach of winter. It is like the common elder both in form and quality, rising up with a square rough; hairy, stalk, about four feet high, though sometimes higher; the winged leaves are somewhat narrower than that aforementioned; but in other respects not unlike them; the flowers are white dashed with purple, standing in umbels, resembling those of the former, except in smell, these being the most pleasant; after the flowers come small blackish berries, full of juice whilst they are fresh, containing small hard kernels, or seed. The root doth creep under the upper crust of the ground, springing in divers places, and being in general about the size of a person's finger.

PLACE. It groweth wild in many parts of the kingdom, and is with difficulty eradicated from the place where it once takes root.

TIME. Most of the elder-trees flower in June, and their fruit is ripe in August; but the dwarf kind, or wall-wort, flowereth somewhat later, and its fruit is not ripe till September.

GOVERNMENT AND VIRTUES. Both the common and dwarf elders are under the dominion of Venus. The first shoots of the common elder boiled like asparagus, or the young leaves and stalks boiled in fat broth, expel phlegm and choler; the middle or inward bark boiled in water, and drunk, purgeth exceedingly; and the berries, either green or dry, are often given with good success for the dropsy; the bark of the root boiled in wine, or the juice thereof drunk, hath the same virtue, though more powerful in its operations. The juice of the root doth strongly provoke vomiting, and purgeth the watery humours of the dropsy. The decoction of the root cureth the biting of a mad-dog, as also that of the adder; it mollifieth the hardness of the womb, and bringeth down the courses; the berries boiled in wine perform the same effect, and the hair of the head washed therewith is made black. The juice of the green leaves applied to the hot inflammations of the eyes, assuageth them, and, being snuffed up the nostrils, purgeth the brain. The juice of the berries boiled with honey, and dropped into the ears, cureth the pains thereof; by drinking a decoction of the berries in wine, urine is provoked; the distilled water of

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the flowers is very serviceable for cleansing the skin from sun-burning, freckles, morphews, &c. It cureth the head-ach by washing it therewith, and, being used as a bath, it is a certain cure for ulcerated legs; it removeth the redness of the eyes, and helpeth those who are afflicted with the palsy.

The dwarf-elder is more powerful than the common in opening and purging choler, phlegm, and water; it helpeth the gout, piles, and the diseases incident to women: it coloureth the hair black, helpeth inflammation of the eyes, and pains of the ears, the biting of serpents or mad dogs, burnings and scaldings, the wind-cholic, the stone, the difficulty of urine, and the cure of old sores and fistulous ulcers. Dr. Butler observes, that the decoction of elder is a most excellent relief for the dropfy.

#### ERYSIMUM.

**DESCRIPTION.** This plant hath long leaves deeply cut or jagged on the edges, not much unlike the leaves of wild mustard; the stalks are small, slender, and pliant, and will twist and wind like withy. Upon each of these stalks grow many yellow flowers; which are followed by long slender husks, containing seed of a sharp biting taste; the root is very long and thick, with many small strings or threads.

**PLACE AND TIME.** It is found in most bye-paths and bank-sides in this kingdom. It generally flowereth in the months of June and July, though sometimes later.

**GOVERNMENT AND VIRTUES.** The seed of this plant taken with honey ripeneth, and causeth the evacuation of tough and clammy phlegm; it is also good against shortness of breath, and is effectual in removing an old cough. If the seed be steeped in fair water, and then dried by the fire, it is good for the gripings of the belly, and expelleth all venom and poison. An ointment made of the seed consumeth and wasteth all hard swellings and imposthumes behind the ears, as also, cankers and swellings in the breasts, genitals, &c.

#### EGLANTINE. ROSA.

THIS is better known by its common name, *sweet-brier*, and is called in some counties wild brier, and pimpnel-rose. The dog-rose, and all other wild roses, are called eglantines.

**TIME AND PLACE.** The sweet-brier, from its fragrant and pleasant smell, is cultivated in most gardens and pleasure-grounds. It grows likewise wild in the borders of fields, and in woods, in almost every part of this kingdom; but not by far so plentifully as the dog-rose. It begins to shoot forth its buds early in the spring, and flourisheth and flowereth during the time of all the other rose-trees.

GOVERNMENT

**GOVERNMENT AND VIRTUES.** Sweet-brier is under the dominion of Jupiter, and the dog-rose is under the Moon. The leaves of the flowers are not so efficacious in medicine as rose-leaves, which, being also more abundant, are always used in preference. The spongy apples or balls which are found upon the eglantine, if pounded to paste, and mixed with honey and wood-ashes, are an excellent remedy for the alopecia, or falling-off of the hair; and, being dried and powdered, and taken in white wine, are good against the stone and gravel, removing the strangury, and strengthening the kidneys. The same, boiled in a strong decoction of the roots, is good to heal the bitings of venomous beasts or mad dogs. The red berries which succeed the flowers, called *hips*, if made into a conserve, and eaten occasionally, gently bind the belly, stop defluxions of the head and stomach, help digestion, sharpen the appetite, and dry up the moisture, of cold rheum and phlegm upon the stomach. The powder of the dried pulp is an excellent remedy for the whites; and, if mixed with the powder of the balls, and given in small quantities, is an excellent remedy for the cholic, and to destroy worms.

#### EUPHORBIUM, OR GUM-THISTLE. EUPHOREIA.

THIS plant is so well known, and so common in every part of this kingdom, that any description of it would be altogether superfluous.

**PLACE.** They grow in most fields and meadows throughout this kingdom, and particularly in grounds sowed with corn.

**TIME.** They flower from the beginning of June until the end of September; the seed progressively ripens from the end of June to the beginning of November.

**GOVERNMENT AND VIRTUES.** This plant is under the dominion of the planet Mars, and partakes more of his fiery nature than any of the other thistles. It is hot and dry in the fourth degree, being a perfect caustic, and of thin parts. A plaster made of it, with twelve times as much oil, and a little wax, heals all aches of the joints, lameness, palsies, cramps, and shrinkings of the sinews. Mixed with oil of bay and bear's grease, it healeth scurfs and scalds in the head, and restoreth lost hair; applied with oil to the temples, it healeth the lethargy; and, by putting it to the nape of the neck, it preventeth the apoplexy. Being mixed with vinegar, it removeth all blemishes of the skin; or, with other ointments, it heateth the parts that are cold, and healeth the sciatica. Taken inwardly, it fretteth the entrails and scorched the whole body; therefore must be beaten small, and tempered with something that lubrifieth and allayeth its heat and sharpness, and then it purgeth water and phlegm. The remedy is *ant' euphorbium*, which is succulent, cold, and slimy. The pills of euphorbium greatly help dropsies, pains in the loins, and gouts, by

moisture. The simple oil of this plant hath the same virtues as that of castor, but is much stronger; if snuffed up the nose, it purgeth the head of phlegm; it is also good in old and cold pains of the joints, liver, and spleen. It is good for cold diseases of the nerves and brain, the head-ach, and pains in the side thereof; it cures the lethargy, being snuffed up the nose; anointed on the privities, it provoketh lust; and it healeth all numbness and stiffness proceeding from cold. *Oleum de euphorbia compositum*, or the compound oil of euphorbium, operates as the simple, but more effectually; it healeth old and cold diseases of the nerves and brain, and prevents drowsiness. It is very effectual in cold pains of the womb, kidneys, and bladder, being anointed on the regions thereof. The extract of euphorbium healeth the palsy, gout, spasm, and dropsy, and bringeth phlegm from the nerves.

#### FERN. POLYPODIUM.

**DESCRIPTION.** OF this there are two kinds principally to be treated of, viz. the male and female. The female groweth higher than the male; but the leaves thereof are less, and more divided or dented, but of the same smell as that of the male. The virtues of each are the same.

**PLACE.** They grow on heaths, and in shady places near the hedge-sides, in most parts of this kingdom.

**TIME.** They flower and seed at midsummer.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Mercury, both male and female. The roots of both of these sorts of ferns being bruised and boiled in mead, or honey-water, and drunk, kill both the broad and long worms in the body, and abate the swelling and hardness of the spleen. The green leaves, eaten, purge the belly of choleric and waterish humours, but they trouble the stomach; they also cause abortion, consequently are unfit for the use of pregnant women. The roots bruised, and boiled in oil or hog's-lard, make a very profitable ointment to heal wounds, or draw forth thorns from the flesh. The powder of them used in foul ulcers, drieth up their malignant moisture, and causeth their speedy healing. Fern being burnt, the smoke thereof driveth away serpents, gnats, and other noisome creatures, which in fenny countries are sometimes very troublesome.

#### WATER-FERN. OSMUNDA.

IT is called ofmond-royal.

**DESCRIPTION.** This shooteth forth in spring-time; it hath several rough hard stalks, half-round, or flattish on one side, and hollow; they are about two feet high, having many branches of winged yellowish-green leaves on all sides, set

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one against another, longer, narrower, and not nicked on the edges; from the top of some of these stalks grows forth a long bush of small and more yellowish-green scaly aglets, set in the same manner on the stalks as the leaves are; these are supposed to be the flowers and seed. The root is rough, thick, and scaly, having a white pith in the middle, which is called the heart thereof.

PLACE. It groweth in moors, bogs, and watery places, in many parts of this kingdom.

TIME. It is green all the summer, but the root liveth during the winter.

GOVERNMENT AND VIRTUES. Saturn owns this plant. It hath all the virtues of the former ferns, though much more effectual in its operations than either, both for inward and outward griefs; and is a singular remedy for wounds, bruises, &c. The decoction drunk, or boiled down to an oil or ointment, and applied, is also good for bruises, and bones broken or disjointed; as also for ruptures and burstings, and giveth much ease to the cholic and in splanetic diseases. The decoction of the root, taken in white wine, provoketh urine exceedingly, and cleanseth its passages. Of the ashes of these ferns, with water, are made balls, (particularly in Warwickshire and Staffordshire,) with which, being dried in the sun, they wash their clothes instead of soap; but, before they use them, they put them into a light fire till they are red hot, and then they will easily powder. This fern also is used in Sussex to burn lime, the flame being very fit for that purpose. The juice of the root is good for burns. The ashes cast upon stones, instead of nitre, make glaſs of a green colour.

#### FEATHERFEW, OR FEVERFEW. MATRICARIA.

DESCRIPTION. COMMON featherfew hath many large fresh green leaves, very much torn or cut on the edges; the stalks are hard and round, set with many such-like leaves, but somewhat smaller; at the tops stand many single flowers, each upon a foot-stalk; they consist of many small white leaves, standing round a yellow thrum. The root is somewhat hard and short, with many strong fibres.—The smell of the whole plant is strong; taste bitter.

PLACE. There are some places in this kingdom where it grows wild; but it is generally a garden plant.

TIME. It flowereth in the months of June and July.

GOVERNMENT AND VIRTUES. This herb is governed by Venus. Being boiled in white wine, and the decoction drunk, it cleanseth the womb, expelleth the after-birth, and is of general utility to the fair sex. It is used for the diseases of the mother, either in the rising or strangling of the same, or when attended with hardness or inflammation, being applied outwardly thereunto. A decoction of the flowers

flowers in wine, with a little nutmeg or mace therein, drunk several times a-day, is an approved provocative of women's courses, as also a great help to expel the dead and after-births; and to sit over the hot fumes of the decoction of the herb, made in water or wine, will prove equally serviceable. The decoction, mixed with sugar or honey, is good to help a cough, to cleanse the chest or stomach of phlegm, and to expel the stone. The powder of the herb taken in wine, with some oxymel, purgeth both choler and phlegm, and is good for those who are short-winded, or are troubled with melancholy, or lowness of spirits; it is effectual in removing all pains of the head arising from a cold, the herb being bruised, and applied to the crown thereof; used in the same manner, it is likewise good for the swimming or giddiness of the head. The decoction thereof drunk warm, and the herb bruised with a few grains of bay-salt, and applied to the wrists, will prevent the return of ague-fits. The distilled water taketh away freckles and other spots of the skin, and other blemishes in the face; the herb bruised, and heated on a tile, with some wine to moisten it, or fried with a little oil and wine, and applied warm outwardly, helpeth the wind and cholic in the lower part of the belly. It is an especial remedy against the too liberal use of opium.

#### FENNEL. ANETHUM.

EVERY garden affordeth this so plentifully, that it needeth no description.

GOVERNMENT AND VIRTUES. It is governed by Mercury, under Virgo, and bear-eth antipathy to Pisces. It is exceeding good to be boiled with fish, as it con-sumeth the phlegmatic humour arising therefrom. Fennel is good to break wind, provoke urine, and ease the pains of, as well as break, the stone. The leavess and seed boiled in barley-water, and drunk, are good to increase milk, and make it more wholesome. The leaves, or rather seed, boiled in water, will stay the hiccough, and take away the loathing which often happens to the stomach of sick and feverish persons, and allayeth the heat thereof; the seed, if it be boiled in wine, and drunk, is good for those who are bitten by a serpent, or have eaten poisonous herbs; the seed and root help to open obstructions of the liver, spleen, and gall, and thereby remove the painful and windy swellings of the spleen, the yellow jaundice, and the gout and cramp; the seed is of great use in medicines given to help shortness of breath, and wheezing by stoppage of the lungs; and it helpeth to bring down the courses, and cleanse the parts after delivery. The roots are good to be put into diet-drinks and broths that are taken to cleanse the blood, to open obstructions of the liver, to provoke the urine, to amend the ill colour of the face after sickness, and to cause a good habit of the body. The distilled water of the whole herb, or the condensate juice dissolved, but especially the natural juice that issueth forth from

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this plant in hot countries,) dropped in the eyes, cleanseth them from mist and film growing upon the sight thereof. The sweet fennel is much weaker in physical uses than the common fennel, and the wild is stronger and hotter than the tame, and therefore more powerful against the stone, but not so effectual to increase milk, because of its dryness.

### SOW-FENNEL. PEUCEDANUM.

BESIDES the common English names of sow-fennel, hog's fennel, hoar-strong, hoar-strang, sulphur-wort, and brimstone-wort, it is called in Latin *peucedanum*.

DESCRIPTION. The common sow-fennel hath many branched stalks of thick and somewhat-long leaves, three of which generally grow together; the stalk is straight and crested, with joints thereon; somewhat less than the common fennel, and branching forth at the top several small sprays with tufts of yellow flowers, after which cometh flat, thin, and yellowish, seed, rather larger than that of the former. The root groweth great and deep, with many fibres hanging thereto, of a strong smell, and yieldeth a yellowish clammy juice, almost like a gum.

PLACE. It groweth plentifully in the low salt marshes near Feversham in Kent.

TIME. It flowereth and seedeth in July and August.

GOVERNMENT AND VIRTUES. This also is an herb of Mercury. The juice of sow-fennel used with vinegar and rose-water, or the juice with a little euphorbium, put to the nose, helpeth those who are troubled with the lethargy, the frenzy, the turning or giddiness of the head, the falling sickness, long and inveterate headache, the palsy, sciatica, cramp, and in general all the diseases of the sinews, being mixed with oil and vinegar, and the affected parts bathed therewith. The juice dissolved in wine, or put into an egg, is good for a cough, or shortness of breath, and to expel wind; it purgeth the belly gently, helpeth the hardness of the spleen, giveth ease to pregnant women, and also to the pains of the reins, bladder, and womb. A little of the juice dissolved in wine, and dropped into the ears, easeth the pains thereof, or, put into a hollow tooth, easeth the tooth-ach. The root is less effectual in all the aforesaid diseases, yet is not without its virtues; the powder of it cleanseth foul ulcers, draweth forth splinters of broken bones, drieth up old and inveterate running sores, and is an excellent salve for green wounds.

### FIG-WORT. SCROPHULARIA.

CALLED also throat-wort.

DESCRIPTION. Common great fig-wort shooteth forth several great, strong, hard, square, brown, stalks, three or four feet high, whereon grow, large, hard,

and dark-green, leaves, two on a joint, being larger and harder than nettle-leaves, but do not sting; at the tops of the stalks stand many purple flowers, set in husks, not unlike those of water-betony, which are followed by round heads with a small point in the middle, containing small brownish seed. The root is large, white, and thick, shooting forth many branches under the upper crust of the earth, which abideth many years, but the leaves perish annually.

PLACE. It groweth frequently in moist and shady places, and in the bottoms of fields and meadows.

TIME. It flowereth about July, and the seed ripens about a month after the flowers are fallen.

GOVERNMENT AND VIRTUES. Venus claims dominion over this herb. It is an excellent remedy for the king's evil or any other disease in the neck; the decoction of the herb taken inwardly, and the bruised herb applied outwardly, dissolveth clotted and congealed blood, coming from any wound, bruise, or fall, and is no less effectual in removing knots, kernels, bunches, and wens, growing in the flesh; it is good also for the hemorrhoids, piles, or other knobs or kernels growing near the fundament. An ointment made hereof may be used for the above purposes when the fresh herb is not to be had. The distilled water of the whole plant, together with the root, may also be used for the aforesaid disorders; it drieth up the superfluous virulent moisture of hollow and corroding ulcers, and taketh away all redness, spots, and freckles, in the face, as also the scurf and blotches therein; and is used with good effect to cleanse the body of the leprosy.

#### FILAPENDULA. SPIREA.

IT is by some called *drop-wort*.

DESCRIPTION. It shooteth forth many leaves of various sizes, growing on each side of a rib, and much dented on the edges, somewhat resembling wild tansy or agrimony, but feeling much harder; among these rise up one or more stalks, two or three feet high, spreading into many other branches, each bearing several white sweet smelling flowers, consisting of five leaves apiece, with small threads in the middle; they stand together in a tuft or umbel, each upon a small footstalk, and are succeeded by round chaffy heads, like buttons, which contain the seed. The root consists of many tuberous pieces, fastened together by many small, long, blackish, strings, which run from one to another.

PLACE. It groweth in many places of this kingdom, in the corners of dry fields and meadows, and also by hedge-sides.

TIME. They flower in June or July, and their seed is ripe in August.

GOVERNMENT

GOVERNMENT AND VIRTUES. It is under the dominion of Venus. It is very effectual to open the urinary passages, and to help the strangury, and all other pains of the bladder and reins, and to expel the stone and gravel, by taking the roots in powder, or a decoction of them in white wine sweetened with sugar; the same also helpeth to expel the after-birth. The roots made into powder, and mixed with honey after the manner of an electuary, are good to be taken by those whose stomachs are swollen, breaking and expelling the wind which was the cause thereof; as also for all diseases of the lungs, as shortness of breath, wheezings, hoarseness of the throat, and the cough, and to expellorate cold phlegm. It is called *drop-wort*, because it giveth ease to those who evacuate their water by drops.

#### FIG-TREE. *Ficus.*

TO give a description of a tree so well known to almost every body who lives in this kingdom, were needless; I shall therefore only observe, that it is much fitter for medicinal purposes than any other.

GOVERNMENT AND VIRTUES. The tree is under the dominion of Jupiter. The milk that issueth from the leaves or branches, when they are broken, being dropped upon warts, taketh them away; the decoction of the leaves is exceeding good to wash sore heads with, nor is there scarcely a better remedy for the leprosy than this; it also clears the face of the morphew, and the body of white scurf, moist scabs, and running sores; if it be dropped into old fretting ulcers, it cleanseth out the moisture and closeth up the flesh. For the sake of convenience, an ointment may be made of the leaves whilst they are green, which will keep all the winter. A decoction of the leaves taken inwardly, or rather the syrup of them, dissolves congealed blood caused by falls or bruises, and is good for the bloody-flux; the ashes of the wood made into an ointment with hog's-lard, cureth kibes and chilblains; the juice, being put into a hollow-tooth, easeth the tooth-ach, and, dropped into the ear, cureth the deafness and pains thereof. An ointment of the juice and hog's grease is an excellent remedy for the biting of a mad-dog, or other venomous beast. A syrup of the green fruit is very good for coughs, hoarseness, shortness of breath, and all diseases of the breast and lungs; it is equally efficacious for the dropsy and falling sickness. It is reported, (but I cannot vouch for its veracity,) that a bull, be he never so mad, by being tied to this tree, will quickly become tame and gentle.

#### FLOWER-DE-LUCE. *IRIS PSEUDACORA.*

IT also beareth the name of *yellow water-flag*.

DESCRIPTION. There are other flower-de-luces, from which this herb differs chiefly in the leaves; those of this plant are much longer and narrower, and of a fad-

sad-green colour; in other respects there is little or no difference. The leaves all grow together, from the middle of which riseth the stalk, bearing on the top small yellow flowers, with three falling leaves, and other three arched that cover their bottoms; but, instead of the three upright leaves which are in the other kinds, in this there are substituted three very short leaves, which are followed by long triangular heads, each containing large and flattish seed. The root is long and slender, of a pale brownish colour on the outside, and of a hoar lightish colour within, having many hard fibres thereat; and of a harsh taste.

**PLACE.** It usually grows in watery ditches, ponds, lakes, and moor-sides, which are filled with standing or running waters.

**TIME.** It flowereth in July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** It is under the dominion of the Moon. The root is of a very astringent, cooling, and drying, nature, and thereby helpeth all lasks and fluxes, whether of blood or humours, as bleeding at the mouth, nose, or other parts, and the immoderate flooding of women's courses. The distilled water of the whole herb, flowers, and roots, is a sovereign remedy for weak eyes, being either dropped therein, or cloths or sponges wet therewith, and applied to the forehead; being also fomented on swellings and hot inflammations, and cankers incident to women's breasts, also foul ulcers in the privy parts of either sex, it is very profitable. An ointment made of the flowers is better for these external applications.

#### FLAX-WEED. *ANTIRRHINUM LINARIA.*

**CALLED** likewise *toad-flax*.

**DESCRIPTION.** Our common flax-seed hath many stalks, thick set with long and narrow blue or ash-coloured leaves, and bearing from the middle upward a vast number of pale-yellow flowers, of a strong unpleasant smell, with deeper yellow mouths, and blackish flat seed in round heads. The root is somewhat woody and white, especially the chief branch of it, which spreadeth itself many ways, having several fibres hanging thereto.

**PLACE.** This growtheth in every part of this kingdom, and is to be found by the way-sides in meadows, banks, and borders.

**TIME.** It blossoms in summer, and the seed is usually ripe about the middle or latter end of August.

**GOVERNMENT AND VIRTUES.** Mars owns this herb. It is frequently used to provoke urine, and to expel the abundance of those watery humours by urine which cause the dropsy. The decoction of the herb, with the leaves and flowers in wine, doth somewhat move the belly downward, open the obstructions of the liver, help-

eth the yellow jaundice, expelleth poison, provoketh women's courses, and driveth forth the dead child and after birth. Being drunk with a dram of the powder of the seed or the bark of the root of wallwort, mixed with a little cinnamon, for several days together, it is esteemed a singular remedy for the dropsy; the juice of the herb, or the distilled water, dropped into the eyes, is a certain cure for all heat, inflammations, and redness, of them; the same, put into foul ulcers, whether cankerous or fistulous, with tents, or the parts washed or injected therewith, cleanseth them thoroughly from the bottom, and healeth them up with safety; it also cleanseth the skin of morphew, scurf, wheals, pimples, or other spots and blemishes, either used by itself, or with the powder of lupines.

#### FLEA-WORT. PLANTAGO.

**DESCRIPTION.** THE ordinary flea-wort riseth up with a stalk about two feet high, though sometimes higher; full of joints and branches on every side, quite up to the top; at each of the joints grow two small, long, and narrow, whitish-green leaves, which are somewhat hairy. At the tops of the branches stand several small, short, scaly, or chaffy, heads, out of which come forth small whitish-yellow threads, somewhat like those of plantain-herbs, which are the blossoms or flowers. The seed contained in those heads is small and shining, and very much resembles fleas, both in size and colour, whilst it is fresh, but turns black as its age advances. The root is short, white, hard, and woody, perishing every year, and rising from its own seed, which it promiscuously sheds. The whole plant is rather whitish and hairy, smelling somewhat like rosin.

There is another sort hereof, differing not from the former in the manner of its growth, but the stalks and branches are somewhat greater, bending down towards the ground; the leaves are rather larger, the heads a little less, and the seed very much like. The root and leaves abide all the year, and do not perish in the winter-season like the former.

**PLACE.** The first groweth only in gardens, but the second, plentifully in fields and pastures near the sea.

**TIME.** They flower in July, or thereabouts.

**GOVERNMENT AND VIRTUES.** The herb is cold and dry, and of a Saturnine quality. The seed fried and taken, stayeth the flux or lask of the belly, and the corrosions that proceed from hot, choleric, sharp, and malignant, humours, or from too strong an operation of any medicine, as scammony, &c. The mucilage of the seed made with rose-water, and a little sugar-candy added thereto, is very good in all hot agues and burning fevers and inflammations; also to allay the thirst, and

lenify the drynes and roughnes of the tongue and throat. It helpeth hoarseness of the voice, diseases of the breast and lungs, caused by heat or sharp salt humours, and also the pleurisy. The mucilage of the seed made with plantain-watter, with the yolk of an egg and a little populeon added thereto, is a safe and sure remedy for the sharpnels, prickings, and pains, of the hemorrhoids, or piles, if it be laid on a cloth and bound thereto. It healeth inflammations in all parts of the body, and the pains arising therefrom, as the head-ach, &c. It easeth the pains of impostumes, swellings, and breakings-out, of the skin, as blains, wheals, pushes, purples, and the like; as also the pains of the joints, gout, sciatica, and dislocated members; and, applied with oil of roses and vinegar, is good to help the bursting of young children, and the swelling of the navel. It is a good remedy for the sore breasts and nipples of women. The juice of the herb, with a little honey, put into the ears, helpeth the running, and destroyeth the worms breeding therein; the same also mixed with hog's grease, and applied to corrupt and filthy ulcers, cleanseth and healeth them.

#### FLEA-BANE. CONYZA.

**NAMES.** IT is called also *mullet*.

**GOVERNMENT AND VIRTUES.** It is hot and dry in the third degree. The herb being spread under foot, or burnt and smoked in any place, will drive away venomous creatures, and will kill and destroy fleas and gnats. An ointment of the root and leaves is used with success for the itch.

#### FLIX-WEEED. SISYMBRIUM.

**DESCRIPTION.** IT riseth up with a round, upright, hard, stalk, four or five feet high, spreading into several branches, whereon grow many greyish-green leaves, very finely cut, and severed into a number of short and almost round parts. The flowers are very small and yellow, growing spike-fashion; after which come very long small pods, containing yellowish seed. The root is long and woody, perishing every year.

There is another sort of this plant, differing from the former only in the leaves, these being somewhat broader; both kinds are of a very disagreeable smell, and of a biting taste.

**PLACE.** They grow wild in sides and by hedge-sides, and highways; also among rubbish, and other places.

**TIME.** They flower and seed in June and July.

**GOVERNMENT AND VIRTUES.** This herb is also Saturnine. The herb and seed are of excellent use to stay the flux and lask of the belly, being taken in water wherein

gads

gads of heated steel have been often quenched ; and is no less effectual for these purposes than plantain or comfrey, and to restrain any other flux of blood, either in man or woman ; as also to consolidate broken and dislocated bones. The juice thereof drunk in wine, or the decoction of the herb taken, killeth the worms in the stomach and belly, as also such as are sometimes seen in putrid and ulcerated wounds. Made into salve, it is a good plaster for foul and malignant sores ; the distilled water of the herb answereth the same purposes, though somewhat weaker, yet it is esteemed a fine medicine, and often chosen in preference to the former. Syrups, ointments, and plasters, of it, are truly valuable household medicines.

FLUELLIN. *ANTIRRHINUM ELATINE.*

DESCRIPTION. IT shooteth forth many long branches, partly lying upon the ground, and partly standing upright, set with almost round leaves, yet a little pointed, and sometimes bordering upon an oval shape, placed without order, somewhat hoary, and of an evil greenish-white colour ; from the joints to the tops of the stalks grow with the leaves, upon small short footstalks, small flowers one at each place, opening or gaping like snap-dragons, or rather like toad-flax, with the upper part of a yellow colour, and the under of a purplish, with a small heel or spur behind ; after these come small round heads, containing small black seed. The root is small and thready, perishing annually, and rising again of its own sowing.

There is another sort which hath longer branches, wholly trailing upon the ground, two or three feet long, and sometimes not quite so thick set with leaves, which also grow upon small footstalks ; they are rather larger than the former, and sometimes jagged on the edges ; but, the lower part being the broadest, and terminating in a small point, its shape does not bear the most distant resemblance to that of the ear of most animals ; it is somewhat hairy, but not hoary, and of a better green than the first. The flowers come forth like those afore-mentioned, but the colour of the upper part is rather white than yellow, and the purple not so fair ; the flower is every way larger, as are the seeds and seed-vessels. The root is like the other, and perisheth yearly.

PLACE. They grow in the borders and other parts of corn-fields and fertile grounds, especially near Southfleet, in Kent ; near the villages of Buckworth, Hamerton, and Rickmansworth, in Huntingdonshire ; and in many other places.

TIME. They are in bloom about June or July, and the whole plant is dry and perished before September.

GOVERNMENT AND VIRTUES. It is a lunar herb. The leaves bruised, and applied with barley-meal to watering eyes that are hot and inflamed by fluxions from the head, help them exceedingly ; as also the flooding of blood and humours,

as

as the lask, bloody flux, women's courses, bleeding of the nofe, mouth, or any other place, or proceeding from any bruise, wound, or bursting of a vein, and greatly helpeth such parts as need confolidating and strengthening ; it is no less effectual in closing and healing green wounds, than in cleansing and curing foul and ulcerated fores, fretting and spreading cankers, &c.

### FOX-GLOVE. DIGITALIS.

**DESCRIPTION.** IT hath many long and broad leaves lying upon the ground, dented about the edges, a little soft or woolly, and of a hoary green colour among these grow up several stalks, but generally one which bears the aforesaid leaves from the bottom to the middle upwards, from whence to the top it is set with large and long, hollow, reddish-purple, flowers, being a little longer at the lower edge, and spotted with white on the inside ; there are threads also in the middle, from whence arise round heads, sharp-pointed at the ends and containing small brown feed therein ; they grow one above another, with small green leaves thereat, hanging their heads downward, and each turning the same way. The roots consist of small fibres, among which are some of a tolerable size. The blossoms are without smell, and the leaves of a bitter hot taste.

**PLACE.** It groweth in dry fandy places, and as well on high as low grounds ; also under the hedge-sides, in almost every part of this kingdom.

**TIME.** It feldom flowereth before July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** This herb is under the dominion of Venus. It is of a gentle cleansing nature, and is frequently used to heal fresh or green wounds, by bruising the leaves and binding them thereon ; and the juice thereof is also used for old fores, to cleanse, dry, and heal, them. The decoction made with sugar or honey, is effectual in cleansing and purging the body, both upwards and downwards, of tough phlegm and clammy humours, and to open obstructions of the liver and spleen. It hath been found by experience to be available for the king's evil, the herb being bruised and applied, or an ointment made with the juice, and so used. A decoction of two handfuls thereof with four ounces of polypody, in ale, hath been found to cure those of the falling sicknes who have been afflicted therewith for upwards of twenty years. It is a fovereign remedy for a fore head.

### FUMITORY. FUMARIA.

**DESCRIPTION.** OUR common fumitory is a tender sappy herb, sending forth, from one square slender weak stalk, and leaning downwards on all sides, many branches two or three feet long, with leaves thereon of whitish, or rather bluish, sea-  
green

green colour, finely cut and jagged ; at the tops of the branches stand many small flowers one above another, forming a kind of spike, of a reddish-purple colour, with whitish berries ; these are succeeded by small round husks, which contain the seed. Its root is yellow, small, and not very long, full of juice while it is green, but perisheth as the seed ripens. In some parts of Cornwall there is a species of this plant which beareth white blossoms.

**PLACE.** It groweth generally in corn-fields and cultivated grounds, and is also a garden-plant.

**TIME.** It flowereth in May, and the seed ripens soon after.

**GOVERNMENT AND VIRTUES.** Saturn claims dominion over this herb. The syrup or juice made hereof, or the decoction made in whey, with some other purging or opening herbs and roots added thereto, in order to strengthen its operation, (being of itself but weak,) is very effectual for the liver and spleen, opening the obstructions thereof, and clarifying the blood from saltish, choleric, and malignant, humours, which cause leprosy, scabs, tetter, itch, and such-like breakings-out of the skin ; and, after having performed these services, it strengthens all the inward parts. It cureth the yellow jaundice, and expelleth it by urine, which it procureth in abundance. The powder of the dried herb, given for some time together, cureth melancholy ; but the seed is most effectual. The distilled water of the herb is also of good effect in the former diseases, and is an excellent preventative against the plague. Being taken with good treacle, or gargled with a little water and honey of roses, it helpeth the sores of the mouth and throat. The juice dropped into the eyes, cleareth the sight, and taketh redness and other defects therefrom. Dioscorides saith, it hindereth the hair from growing afresh on the eyelids, if they are anointed with the juice hereof having gum arabic dissolved therein. The juice of fumitory and docks mingled with vinegar, and the places gently washed or wet therewith, cureth all sorts of scabs, pimples, itch, wheals, or pushes, which are incident to the face, hands, or any other part of the body.

#### FURZE-BUSH. ULEX.

IT is so well known by this name, also by that of *goats*, or *whins*, that a minute description would be totally useless.

**PLACE.** It is known to grow on dry barren heaths, and other waste, gravelly, and sandy, grounds.

**TIME.** They flower in the summer-months.

**GOVERNMENT AND VIRTUES.** Mars owns this herbg. It is hot and dry, and good to open obstructions of the liver and spleen. A decoction made with the flowers

is effectual against the jaundice, as also to provoke urine, and cleanse the kidneys from the gravel and stone.

### FENUGREEK. TRIGONELLA.

**NAMES.** IT is called in Latin *faenum Græcum*, or otherwise "Greek hay."

**DESCRIPTION.** It groweth up with tender stalks, round, blackish, hollow, and full of branches; the leaves are divided into three parts, like those of trefoil; the flowers are pale or whitish, not much unlike the blossoms of lupines, but smaller. After these are fallen away, there follow long cobs or husks, crooked and sharp-pointed, wherein is contained the seed, which is of a yellowish colour. The root is full of small hanging hairs.

**PLACE.** It very seldom groweth in this kingdom, unless planted in the gardens of botanists.

**TIME.** It blossoms in July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** Fenugreek-seed is hot in the second degree, and dry in the first, and under the influence of the planet Mercury. The seed, which is sold by druggists and apothecaries, is only used in medicine. The decoction or broth of the seed, drunk with a little vinegar, expelleth and purgeth all superfluous humours which cleave to the bowels; the same decoction first made with dates, and afterwards formed into a syrup with honey, mundifieth and cleanseth the breast, chest, and lungs, and may be taken with success for any grief attendant thereon, provided the patient be not afflicted with a fever or head-ach, as this syrup, being hurtful to the head, would rather increase than alleviate those disorders. It is of a softening and dissolving nature; therefore the meal thereof, being boiled in mead or honey-water, doth consume, soften, and dissolve, hard swellings and imposthumes; also a paste made thereof with saltpetre and vinegar, doth soften and waste the hardness and swelling of the spleen. It is good for women who are afflicted with an imposthume, ulcer, or stoppage, in the matrix, to bathe and sit in a decoction thereof; also a suppository made of the juice of this plant, and conveyed to the neck of the matrix, will mollify and soften all hardness thereof. The decoction of fenugreek is an excellent wash for the head, as it cleanseth the head of every kind of dirt, viz. scurf, scales, dandriff, nits, &c. or, applied with honey, it cleanseth the face and other parts of pimples, pushes, wheals, and other blemishes; it healeth the itch, and preventeth the disagreeable smell which oftentimes proceeds from perspiration. The seed, being prepared after the manner of lupines, and eaten, will gradually and gently purge the belly of costive humours.

## FISTIC-NUTS. PISTACIA.

**NAMES.** THESE nuts are also called in shops *pistacies*, and *fisticci*.

**DESCRIPTION.** The tree bearing these nuts hath long great leaves, spread abroad, consisting of five, seven, or more, growing one against another, upon a reddish rib or sinew, whereof the last, which is alone at the top, is much the largest; the fruit is much like hazel-nuts, or the kernels of the pine-apple.

**PLACE.** This tree is a stranger in this country, but is a native of Syria and other eastern parts.

**GOVERNMENT AND VIRTUES.** Fistic-nuts are under the influence of Jupiter. They are of a mean or temperate heat, and somewhat astringent; they are good to open stoppages and obstructions of the liver, and for strengthening the fame; they are also good for the stomach, as they open the pipes of the breast and lungs; and, being eaten either alone or with sugar, are exceeding good for the phthisic and shortness of breath. Dioscorides saith, that fistic-nuts given in wine are an excellent remedy for the biting of venomous beasts.

## FLAX. LINUM.

**NAMES.** IT is called in Latin *linum*, by which name it is well known in shops; also *lin*, whence the cloth that is made thereof is called linen-cloth; its seed is called linseed, and the oil produced therefrom linseed-oil.

**DESCRIPTION.** Flax hath a tender stalk, covered with sharp narrow leaves, parted at the top into small short branches, which bring forth fair blue flowers; these are succeeded by round knobs or buttons, containing a blackish, large, fat, and shining, seed.

**PLACE.** It is cultivated in this country; being sown in fine moist fertile grounds, especially such as lie low.

**TIME.** It flowereth in May and June, and ripens soon after.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Venus; the seed of this plant, being only used in medicine, is hot in the first degree, and temperately moist and dry. The seed, or linseed, being boiled in water and applied as a poultice or plaster, affuageth all pains, softenneth cold tumours or swellings; the imposthumes of the neck and ears, and of other parts of the body. Linseed pounded with figs is good to ripen and bring to a head boils and other swellings; also to draw forth thorns and splinters, being mixed with the root of wild cucumber. The seed mingled with honey and cresses, and laid upon rough, rugged, and ill-favoured, nails, either of the hands or feet, cleanseth and clarifieth those that are corrupt; or, laid on the face, cleanfeth

cleanseth and taketh away all spots and freckles thereof. The wine wherein linseed hath been boiled, preserveth old sores and ulcers from corruption, being washed therewith, and from festering and inward rankling ; the water wherein linseed hath been boiled doth quicken and clear the sight, by being often dropped into the eyes. Used in clysters, it assuageth the griping pains of the belly, as well as of the matrix or mother, and cureth all wounds of the same. The seed mixed with honey, and taken as an eleuary, cleanseth the breast, and helpeth the cough ; compounded with raisins, it is good for such as are consumptive, or troubled with hectic fevers. The seed of lin taken in too great a quantity, is injurious to the stomach ; it engenders wind, and hinders digestion of meat.

#### FIR-TREE. PINUS LARIX.

**NAMES.** This tree is called in Latin *abies*, by the Dutch *mastboom*, because of its utility in making masts for ships ; and the liquid or clear rosin that issueth from the bark of the young trees is called *terebinthia Veneta*, but is generally known to us by the name of Venice turpentine.

**DESCRIPTION.** The fir-tree is large, high, and long, and continues always green ; it grows much higher than the pine or pitch tree ; the stalk is very even and straight, plain beneath, and without joints, but upwards it grows with joints and knobs ; upon these joints grow the branches, bearing leaves almost like a yew, but smaller, longer, and sharper at the ends, of a bluish-green colour ; the fruit is like the pine-apple, but smaller, and narrower, not hanging down, but growing straight upward. From out of the bark of the young trees is gathered a fair liquid rosin, clear and shining, in taste bitter, almost like to citron-peel or lemon-peel condited. There is also found upon this tree, a white rosin or gum, somewhat like that which the pine and pitch tree produce.

**PLACE.** It grows upon the high mountains in Greece, Italy, Spain, and France, and in many places of Germany and Norway ; from whence the timber thereof is imported into this kingdom, for the purposes of building, &c.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Mars. The bark and dry gum or rosin of this tree, are in temperature and virtues like the bark and rosin of the pine-tree, but those of the fir-tree are of a more acrimonious and cleansing quality. The liquid or clear rosin is hot and dry in the second degree, of a sharp quality, and of a digestive or cleansing nature ; this liquid, taken to the quantity of half an ounce, looseth the belly and expelleth all choleric humours ; it mündifieth and cleanseth the kidneys and bladder, provoketh urine, expelleth the stone and gravel, and is good to be taken often by those who are troubled with the gout ;

the

the same taken with nutmeg and sugar, about the quantity of a nut, helpeth the strangury, and is very good against excoriations or going-off of the skin, or flux of the privities. It is also an excellent remedy for green wounds, especially those of the head; for it cleanseth and healeth speedily.

### GARLIC. ALLIUM.

IT is so universally known, that I shall decline troubling my readers with any description of it.

GOVERNMENT AND VIRTUES. Mars owns this herb. It provoketh urine and women's courses, and helpeth the biting of mad dogs and other venomous creatures; it killeth worms in children, cutteth and bringeth forth tough phlegm, purgeth the head, helpeth the lethargy, and is a good preservative against, and a remedy for, any plague-fore, or foul ulcer; it taketh away spots and blemishes of the skin; easeth pains of the ears, and ripeneth and breaketh imposthumes and other swellings. It has been noticed that onions are equally effectual for the said purposes, but garlic hath many peculiar virtues which the onion cannot boast of: for instance, it hath a special quality to remove all inconveniences proceeding from corrupt agues or mineral vapours, or from drinking stagnated or unclean water; as also by taking of wolf-bane, hen-bane, hemlock, or other poisonous herbs. It is also exceeding good in hydroptic diseases, the jaundice, falling sickness, cramps, convulsions, the piles or hemorrhoids, and other cold diseases. However, having showed its many virtues, it is also necessary that its vices should not be concealed: its heat is very vehement, and every thing of that description naturally conveys ill vapours to the brain; in choleric cases it adds fuel to the fire; in men oppressed with melancholy, it extenuates the humour, and confounds the idea with strange visions and fancies; and therefore ought to be taken with the strictest care by those whose ill disposition of body will not admit of a liberal application. A few cummin-seeds, or a green bean or two, being chewed after eating garlic, will entirely remove the disagreeable smell of the breath proceeding therefrom.

### GENTIAN. GENTIANA.

CALLED also *felwort* and *baldmony*.

It is acknowledged that the gentian used by us some years ago was imported from beyond the sea; but we have since happily found that our own country is by no means deficient of those blessings which can contribute to the health of man. There are two sorts of gentian the growth of this kingdom, which have been proved,

by the experience of the most able physicians, to be rather of superior excellence to that of the foreign herb.

**DESCRIPTION.** The greater of the two hath many long and small roots, which grow deep in the ground, and abide all the winter. The stalks grow several together, of a brownish-green colour, which are sometimes two feet high, especially if the soil is good, having many long, narrow, dark-green, leaves, set by couples up to the top; the flowers are long and hollow, of a brightish purple colour, and ending in five corners.

The smaller kind groweth up with several stalks, not quite a foot high, parted into many branches, whereon grow two or three small leaves together, not unlike those of the smaller centaury, of a whitish-green colour; on the top of the stalks grow divers perfect blue flowers, standing in long husks, but not so big as the other. The root is very small and thready.

**PLACE.** The former groweth in many places in the east and west countries, as at Longfield, near Gravesend; also at Cobham, Leillingstone, and in the chalk-pits adjacent to Dartford, in Kent. The second kind groweth also in many places in Kent, as about Southfleet and Longfield, and upon the barren hills in Bedfordshire. It is likewise found not far from St. Alban's, upon a piece of waste ground, on the road from Dunstable towards Gorhambury.

**TIME.** They bloom in August, and shed their seed soon after.

**GOVERNMENT AND VIRTUES.** They are under the dominion of Mars. They resist putrefaction, poison, and pestilence; nor is there a more excellent herb for strengthening the stomach, and helping digestion; it preserves the heart, and prevents fainting and swooning. The powder of the dried root helps the biting of venomous beasts, opens the obstructions of the liver, and restores lost appetite. Steeped in wine and drunk, it refreshes such as are weary with travelling; it helps stitches and griping pains in the sides, and is an excellent remedy for such as are bruised by falls; it provokes urine and the terms exceedingly, consequently should be avoided by pregnant women. The decoction is very profitable for those who are troubled with cramps and convulsions; also it breaks the stone, and is a great help for ruptures. It is good for cold diseases, and to expel tough phlegm, and cure all scabs, itch, and fretting sores and ulcers. It is an admirable remedy to destroy the worms in the body, by taking half a dram of the powder in the morning in any convenient liquor; and is equally good for the king's evil. To help agues of all sorts, the yellow jaundice, and the bots in cattle, there is no herb superior to this. When kine are bitten on the udder by any venomous beast, if the affected parts are washed with a decoction hereof, it will prove a certain cure.

**CLOVE-**

## CLOVE-GILLIFLOWERS. DIANTHUS.

TO describe this herb, it being so well known, would be altogether fruitless.

GOVERNMENT AND VIRTUES. They are fine temperate flowers, of the nature and under the dominion of Jupiter; even so temperate, that no excess, either in heat, cold, dryness, or moisture, can be perceived in them. They are great strengtheners of the brain and heart, and will therefore make an excellent cordial for family-purposes. Either the conserve or syrup of these flowers taken at intervals, is good to help such whose constitution is inclinable to be consumptive. It is good to expel poison, and help hot pestilent fevers.

## GERMANDER. TEUCRIUM.

DESCRIPTION. COMMON germander shooteth forth many stalks, with small and somewhat-round leaves, dented on the edges; the flowers stand at the tops, of a deep purple colour. The root is composed of many sprigs, which shoot forth a great way round about, soon overspreading the adjacent ground.

PLACE. It groweth usually in gardens.

TIME. It flowereth in June and July, and the seed is ripe in August.

GOVERNMENT AND VIRTUES. It is an herb under the dominion of Mercury. It strengthens the brain and apprehension exceedingly, and relieves them when drooping; taken with honey, it is a remedy for coughs, hardness of the spleen, and difficulty of urine; or made into a decoction and drunk, it helpeth those who are troubled with the dropsy, especially if taken at the beginning of the disorder. It also bringeth down women's courses, and expelleth the dead child; being drunk in wine, and the bruised herb outwardly applied, it is a certain cure for the poison of serpents: used with honey, it cleanseth old and foul ulcers; made into an oil, and the eyes anointed therewith, taketh away the moisture and dimness of them; and is good for the pains of the sides and cramps. The decoction thereof, taken for some days together, driveth away and cureth both the tertian and quartan agues; it is also good against all diseases of the brain, as continual head-ach, falling sickness, melancholy, drowsiness, dulness of the spirits, convulsions, and palsey. A dram of the seed taken in powder, purgeth by urine, and is good against the yellow jaundice. The juice of the leaves dropped into the ears killeth the worms in them; and the tops thereof when they are in bloom, steeped twenty-four hours in a draught of white wine and drunk, killeth and expelleth worms in the belly.

## STINKING GLADWIN. IRIS FÆTIDA.

DESCRIPTION. THIS is a species of the flower-de-luce, having several leaves growing from the root, very much resembling those of the flower-de-luce, but that

they

they are sharper-edged and thicker in the middle, of a deeper green colour, narrower and sharper-pointed, and of a strong disagreeable smell when pressed between the fingers: in the middle riseth up a reasonable-sized stalk, about a yard high, bearing three or four flowers at the top, made somewhat like those of the flower-de-luce, with three upright leaves, of a dead purplish ash-colour, with veins in them of a different colour; the other three leaves do not fall down, neither are the three small ones so finely arched, nor do they cover those at the lower part; in these particulars it differs somewhat from that aforesaid. These are succeeded by three-square hard husks, opening wide into three parts when they are ripe, wherein lie reddish seed, which in time turneth black. The root is like that of the flower-de-luce, but reddish on the outside and whitish within, of a very sharp and hot taste, and of an exceeding disagreeable smell.

PLACE. This groweth as well on the upland grounds as in woods and moist shadowy places, as also by the sea-side, in many parts of this kingdom; and is often cultivated in gardens.

TIME. It blossoms in July, and the seed is ripe in August and September; yet the husks, when they are ripe, will open themselves, and contain their seed two or three months before they shed it.

GOVERNMENT AND VIRTUES. It is supposed to be under the dominion of Saturn. A decoction of the roots purgeth corrupt phlegm and choler; but, when wanted to operate more gently, a few slices of the roots infused in ale will answer the purpose; though those whose stomachs will not admit of this, make use of the leaves only. The juice hereof snuffed up the nostrils causeth sneezing, and thereby draweth from the head much corruption; or the powder thereof, used the same way, produceth the like effect. The powder drunk in wine, helpeth those who are troubled with cramps and convulsions, or with the gout or sciatica, and easeth the gripings of the belly; it helpeth the strangury, and cleanseth, purgeth, and stayeth, the sharp and evil humours which cause long fluxes. The root boiled in wine and drunk, doth effectually procure women's courses, and, used as a pessary, worketh the same effect; but causeth abortion in women with child. Half a dram of the seed beaten to powder and taken in wine, doth speedily cause an evacuation of urine; or, taken with vinegar, dissolveth the hardness and swellings of the spleen. The root is very effectual in all wounds, and particularly those of the head; as also to draw forth splinters, thorns, broken bones, or any other thing sticking in the flesh, by being used with a little verdigrease and honey, together with the great centaury-root. The same boiled in vinegar, dissolveth and consumeth tumours and swellings. The juice of the leaves and roots healeth the itch, and cleanseth the skin from all blemishes.

## GOLDEN-ROD. SOLIDAGO.

**DESCRIPTION.** IT groweth up with brownish, small, round stalks, two feet high, and sometimes more ; having thereon many narrow and long dark-green leaves, generally plain on the edges, and are sometimes, though very rarely, found with white streaks or spots thereon ; the stalks are divided towards the top into many small branches, bearing thereon small yellow flowers, all which are turned one way ; these, being ripe, are succeeded by a kind of down, which is carried away by the wind. The root consists of many small fibres, which grow but a little beneath the surface of the ground ; it liveth for some years shooting forth new branches yearly, which perish at the approach of winter.

**PLACE.** It grows in the open places of woods and coppices, both in moist and dry grounds, in many parts of this kingdom.

**TIME.** It flowereth about the month of July.

**GOVERNMENT AND VIRTUES.** Venus claims dominion over this herb. It is spoken of by Arnoldus de Villa Nova as a most excellent remedy for the stone in the reins and kidneys, as also to expel the gravel by urine. The decoction of the herb, either green or dry, or the distilled water thereof, is very effectual for inward bruises, likewise for staying the floodings of the body, as fluxes of humours, bloody fluxes, and the immoderate menses of women ; and is most available in all ruptures or burstings, being internally or externally applied. It is a sovereign wound-herb, whereby green wounds and old ulcers are speedily cured ; it is of particular efficacy in all lotions for sores or ulcers in the mouth, throat, or privities of either sex. A decoction is serviceable to fasten the teeth when loose.

## GOUT-HERB. ÆGOPodium.

THIS herb is also frequently called *herb-gerrard*.

**DESCRIPTION.** It is very low, seldom rising more than half a yard high ; it consists of several leaves, which stand on brownish-green stalks, generally three together, snipped on the edges, and of a strong unpleasant smell. The umbels of flowers are white, and the seed blackish ; the root runneth deep into the earth, and soon spreads itself over a great deal of ground.

**PLACE.** It groweth by hedge and wall sides, and often in the borders and corners of fields ; and sometimes in gardens.

**TIME.** It flowereth in July, feeding about the latter end of the same month.

**GOVERNMENT AND VIRTUES.** Saturn is the ruler of this plant. It is probable it took the name of gout-herb from its peculiar virtues in healing the cold gout and sciatica, as it hath been found by experience to be a most admirable

remedy for these disorders; as also joint-achs, and other cold disorders. It is even affirmed, that the very carrying of it about in the pocket will defend the bearer from any attack of the aforesaid complaint.

### GROMEL. LITHOSPERMUM.

OF this I shall briefly describe three kinds, which are chiefly used medicinally; the virtues of each are the same, but different in the manner of their growth.

DESCRIPTION. The *greater gromel* riseth up with slender, hard, and hairy, stalks, trailing and taking root as it lieth on the ground; it spreads itself by several small branches, whereon grow hairy dark-green leaves. At the joints, with the leaves, grow many small blue flowers, which are succeeded by hard, stony, roundish, seed. The root is round and woody, and liveth during the winter, shooting forth fresh herbage every spring.

The *small wild gromel* growtheth up with several straight, hard, branched, stalks, two or three feet high, full of joints, bearing at each, small, long, hard, and rough, leaves, very much like the former, but less. Among these leaves grow small white blossoms, which are followed by greyish round seed like the first. The root is not very large, but exceedingly thready.

The *garden gromel* hath many upright, slender, woody, hairy, stalks, brown, and crested, with but few branches, bearing leaves like the former; the flowers are white, after which come rough brown husks, containing white, hard, round, seed, shining like pearls, and greater than either of the former. The root is like that of the first, with many branches and strings thereat; and of long duration.

PLACE. The two first grow wild in barren and untilled places; the last is a nurſling in the gardens of the curious.

TIME. They all flower from Midsummer till September, and the seed ripeneth quickly after.

GOVERNMENT AND VIRTUES. The dominion over these herbs is wholly claimed by Venus. They are of singular force in breaking the stone and expelling gravel, either in the reins or bladder; as also to provoke urine, and help the strangury. The seed is most effectual for the above purposes, being bruised and boiled in white wine, or other convenient liquor; the powder of the seed is equally efficacious. Two drams of the seed in powder taken with breast-milk, will procure a speedy delivery to women afflicted with hard travail, and that cannot be delivered. The herb itself, (when the seed is not to be had,) either boiled, or the juice thereof drunk, will answer all the aforesaid purposes, though not so powerful in its operation.

## GOOSEBERRY-BUSH. RIBES.

CALLED also seap-berry, and, in Sussex, dewberry-bush; and likewise in many places wine-berry.

GOVERNMENT AND VIRTUES. They are under the dominion of Venus. The berries, whilst they are unripe, being scalded or baked, are good to procure the return of a lost appetite, especially if the cause proceeds from a stomach afflicted with choleric humours. They are exceeding good to stay the longing of pregnant women. The decoction of the leaves of the tree cools hot swellings and inflammations, as also the St. Anthony's fire. The ripe gooseberries, being eaten, are an excellent remedy to allay the violent heat of the stomach and liver; and the young and tender leaves break the stone and expel the gravel both from the bladder and kidneys. If they are taken immoderately, they are supposed to breed crude humours, and engender worms.

## WINTER-GREEN. PYROLA.

DESCRIPTION. IT shoots forth seven, eight, or nine, leaves, from a small, brownish, creeping, root, each standing upon a long footstalk; they are nearly as broad as they are long, round-pointed, of a sad-green colour, hard in handling, and somewhat like the leaf of a pear-tree. From among these riseth up a slender weak stalk, standing upright, bearing at the top many small, white, and sweet-smelling, flowers, laid open like a star, consisting of five round-pointed leaves, with many yellow threads standing in the middle, surrounding a green head, having a longish tube with them, which in time proveth to be the seed-vessel; when ripe, it is of a five-square shape, with a small point, containing seed as small as dust.

PLACE. It groweth but seldom in fields, but frequently in woods in the northern counties in this kingdom, as Yorkshire, Lancashire, &c.

TIME. It flowereth in June and July, shedding its seed soon after.

GOVERNMENT AND VIRTUES. Winter-green is under the dominion of Saturn, and is an excellent remedy for the speedy healing of green wounds, the leaves being bruised and applied; or the juice of them is equally effectual. A salve made of the bruised herb, or the juice boiled in hog's-lard, or with salad-oil and wax, adding a little turpentine thereto, is a sovereign medicine, and in high estimation among the Germans, who use it to heal all manner of wounds, ulcers, and sores. The herb boiled in wine and water, and drunk by those who are troubled with ulcers in their kidneys, or neck of the bladder, wonderfully helpeth them. It stayeth all fluxes, whether of blood or humours, as the lask,

bloody

bloody flux, immoderate menstrua, and bleeding of wounds ; and taketh away such inflammations as arise from the pains of the heart. It is no les available for foul ulcers that are hard to be cured, as also for cankers and fistulas. The distilled water of the herb will perform the same cures, though not so speedily.

#### GROUNDSEL. SENE<sup>C</sup>IO.

**DESCRIPTION.** Our common groundsel hath a round, green, and somewhat-brownish, stalk, spreading towards the top several branches, set with long and somewhat-narrow green leaves, cut in on the edges, not much unlike oak-leaves, but les, and round at the ends ; at the tops of the branches stand many small green heads, out of which grow yellow threads or thrums, which are the flowers : these continue many days thus blown before they are turned into down, which, with the seed, is carried away by the wind. Its root is small and thready, soon perishing, and as soon rising again from its own sowing.

**PLACE.** It grows almost every-where, as well on the tops of walls as among all kinds of rubbish and rude grounds, but especially in gardens.

**TIME.** It may be seen in bloom at almost any time of the year ; and, if permitted to occupy good ground, each plant will spring and feed at least twice in a year.

**GOVERNMENT AND VIRTUES.** This herb is influenced by Venus. It is an universal remedy for all diseases proceeding from heat, in whatever part of the body they may chance to happen ; it is a safe and gentle purge for a foul stomach, operating each way. It is of a moist and cold nature, consequently causeth expulsion, and reppresseth the heat caused by the motion of the internal parts, through the effects of an emetic or other medicine. This herb preserved, either as a syrup, an ointment, or distilled water, is a medicine unrivalled in its efficacy for the cure of all hot diseases, both for safety and speed. The decoction of this herb, as Dioscorides observes, made with wine, helpeth the pains of the stomach, proceeding from choler ; and the juice taken in drink, or the decoction in ale, gently performeth the same. It is good against the falling-sicknes and jaundice ; and a dram given in oxymel, after using a little exercise, provoketh urine, and expelleth the gravel from the reins and kidneys ; also it helpeth the sciatica, cholic, and pains of the belly. The people in Lincolnshire use this externally against pains and swellings ; and, as they affirm, with great success.

#### GALINGAL. KÆMPFERIA.

**DESCRIPTION.** It hath long, hard, and narrow, leaves ; the stalk is triangular ; about a foot and a half high, bearing on the upper part several small leaves, from among

among which grow spiky tops and white seed; the root is long, and consists of many threads, which are much tangled one within the other.

PLACE. It groweth in low and moist grounds; it is seldom seen in this kingdom, unless such as is planted in gardens.

TIME. This herb bringeth forth its spiky tops and seed, together with its leaves, in June and July.

GOVERNMENT AND VIRTUES. It is a plant of Mars, and the root is hot and dry in the third degree. The roots boiled, and the decoction drunk, provoke urine, bring down the menses, expel the stone, and are good for those who are troubled with the dropsy; the same is also good for the cough, the stingings of scorpions, and bitings of venomous beasts. By bathing the belly with this decoction, it fapples the hardnes of the mother, and remedieith the stoppings and coldnes thereof. The powder of the root drieth up and healeth old running sores of the mouth and privities, being wet with wine, and laid thereon; and is an excellent ingredient for hot ointments and maturative plasters. Pliny says, that the seed of galinal drunk with water stoppeth the flux of the belly, and the immoderate floodings of the menstrua; but the greatest care must be taken in using it, as too great a quantity will cause a violent head-ache.

#### STOCK-GILLIFLOWERS. *CHEIRANTHUS INCANUM.*

KINDS AND NAMES. THERE are two kinds of these flowers: the one is called the castle or stock gilliflower, which may be kept both winter and summer; the other is not so large, and is called the small stock-gilliflower, which must be annually sown; they are called *leucoion*, and *violæ albæ*, or white violets, because the leaves are white; the leaves of the flowers are of various colours, and called by some writers *violæ matroniales*, or dame's violets.

DESCRIPTION. These two plants are not much unlike wall-flowers, but that their leaves are whiter and softer; however, I shall treat of them respectively.

The great castle or stock gilliflower beareth hard and straight leaves, about two feet long, by far longer and larger than the leaves of wall-flowers. The blossoms are of a fragrant or pleasant smell, somewhat like those of heart's-ease, though much larger; sometimes of a white, sometimes of an ash, colour; some of a carnation, and others of a scarlet and purple, colour. These are followed by long husks, containing flat and large seeds.

The small stock-gilliflower has stalks somewhat like the former, with whitish, woolly, soft, leaves; the flowers are of a fine fragrant smell, and of various co-

lours, followed by seeded cods, and in every respect like the first, except being somewhat smaller. It is about a foot high, and perisheth yearly.

PLACE. They are sown and planted in most of our English flower-gardens, but are seldom found growing wild.

TIME. The great castle-gilliflower blossoms in March and April, the second year after it is sown; but the smaller kind flowereth in July and August, the same year in which it is first sown.

GOVERNMENT AND VIRTUES. They are of temperature hot and dry, of a similar nature with the yellow or wall gilliflowers, and are plants of Mercury. The flowers of the stock-gilliflower, boiled in water and drunk, are good to remove all difficulty of breathing, and help the cough; they also provoke the courses of urine; and, by bathing or sitting over the decoction, it causeth perspiration.

#### WALL OR YELLOW GILLIFLOWER. CHEIRANTHUS CHEIRI.

NAMES. THIS is a small bush or shrub, called in Latin *leucocia leutea*, and by the apothecaries *keyri*; in English, yellow and wall gilliflowers.

DESCRIPTION. The yellow wall-gilliflower is green both winter and summer; the stalks thereof are hard, of a woody substance, and full of branches; the leaves are thick set thereon, long, narrow, and green; on the top of the stalks grow the flowers, which are of a very fair yellow colour, of a strong but pleasant smell, and every flower is divided into four small leaves; after these are past, there come cods or husks, which contain large, flat, and yellow, seed.

PLACE. It grows in great quantities on the ruined walls of stone buildings; and is very often planted in gardens, though the garden kinds are generally double flowered, which gives them a peculiar beauty the other cannot boast of.

TIME. It generally flowers in March, April, and May.

GOVERNMENT AND VIRTUES. They are hot and dry plants of the Sun, whose influence they are under, being of subtile parts. Being dried, and boiled in water, it provokes urine, and bringeth down the terms; it helpeth the scirrhus, or hard imposthumes, of the matrix, by being fomented therewith; a plaster, made of the blossoms with oil and wax, is good to heal chaps of the fundament, and the falling-down of the same; or, mingled with honey, cureth ulcers and sores of the mouth. Two drams of the seed taken in wine is a sure specific for bringing down the menstrua, secundine, and dead child; or a pessary made of the same, and conveyed into the matrix, answereth the same purpose. The juice dropped into the eyes, cleanseth them from spots and dimness; and the root, stamped with vinegar, and applied to the spleen, helpeth the hardness thereof.

GALL-OAK. *QUERCUS ROBUR.*

**DESCRIPTION.** The strong gall-oak, so named from the fruit it bears, doth not grow so large nor high as other oaks, but shorter and very crooked, with fair spreading branches: on these grow long leaves, very much cut in on the edges, and hoary underneath. This tree flowereth, and beareth acorns, as also a round woody substance, which is called a gall;\* and the timber is of a very hard substance. There are several kinds of gall-oaks, some of them are much shorter than others, bearing leaves more or less cut or jagged on the edges, and producing a greater quantity of galls, and no acorns at all; some bear large galls, others small; some knobbed or bunched, and others smooth; each is of different colours, some white, others red, yellow, and green.

**PLACE.** These oaks grow frequently in Italy, Spain, and other hot countries.

**TIME.** They shoot forth their long catkins or blossoms early in the spring, which fall away for the most part before the leaves appear. The acorns are very seldom ripe before October.

**GOVERNMENT AND VIRTUES.** I shall here explain the use, virtues, and temperament, of the galls of the foreign trees only, as their acorns differ but little from those produced by our English oaks.

The small gall, called *omphacitis*, is dry in the third degree, and cold in the second; Saturnine, and of a four harsh nature. It is effectual in drawing together and fastening loose and faint parts, as the overgrowing of the flesh; it expelleth and drieth up rheums and other fluxes, especially those that fall upon the gums, almonds of the throat, and other places of the mouth.

The other whiter gall doth also bind and dry, but not so much as the former; having a less quantity of that four harshness in it, it is good against the dysentery or bloody flux. The decoction of them in water is of a mean abstraction, but more powerful in harsh red wine; being sat over, it remedijeth the falling of the mother; or the galls, being boiled and bruised, and applied to the fundament when falling, or to any swelling or inflammation, will prove a certain cure. The coals of burned galls, when quenched in wine or vinegar, are good to staunch bleeding in any place. They will dye the hair black, and are one of the chief ingredients for making ink; they are likewise used by dyers for making black dye.

The oak-apple is much of the nature of galls, though inferior in quality, but may be substituted for them with success to help rheums, fluxes, and other such-like painful distempers.

\* It is now well known that the gall is produced by an insect of the hymenopterous order, called *Cynips*; for a description of which, see System of Nat. Hist. by the Editors of the Ency. Lond. vol. xiii. p. 53 and 329.

## HEART's-EASE. VIOLA.

IT is called in Sussex pansies ; and is so well known by almost every person, that I shall decline troubling my readers with a description of it.

PLACE. Besides those which are cultivated in gardens, they grow wild in barren and unfertile grounds.

TIME. They flower and seed all the time of spring and summer.

GOVERNMENT AND VIRTUES. This is a Saturnine plant, of a cold, slimy, and viscous, nature. A strong decoction of the herb and flowers is an excellent cure for the venereal disorder, being an approved anti-venereal ; it is also good for convulsions in children, falling sickness, inflammations of the lungs and breast, pleurify, scabs, itch, &c. It will make an excellent syrup for the aforesaid purposes.

## ARTICHOKE. CYNARA.

GOVERNMENT AND VIRTUES. THEY are under the dominion of Venus. They are great provocatives to lust, yet stay the involuntary course of natural seed in man ; the decoction of the root boiled in wine, or the root bruised and distilled in wine, and drunk, purgeth by urine exceedingly.

## HART's-TONGUE. ASPLENIUM.

DESCRIPTION. IT consists of several leaves rising from the root, every one separately, folding themselves in their first springing and spreading ; when at their full growth, they are about a foot long, smooth and green, but hard and sappy in the middle, streaked on the back athwart on both sides of the middle rib, with small and somewhat-long brownish marks ; the bottoms of the leaves are a little bowed on each side of the middle rib, and somewhat small at the end. The root is composed of many black threads, which are much entangled together.

TIME. It is green all the winter, having new leaves every year.

GOVERNMENT AND VIRTUES. Jupiter claims dominion over this herb. It is a singular remedy to strengthen the liver when weak, and ease it when afflicted ; it is esteemed for its efficacy in removing the hardness and stoppings of the spleen and liver ; also against the heat of the liver and stomach, as well as the lask and bloody flux. The distilled water is good for the passions of the heart, and gargled in the mouth will stay the hiccough, help the falling of the palate, and stop the bleeding of the gums. It is a good remedy for the biting of serpents.

HAZEL-

## HASEL-NUT. CORYLUS.

THEY are so well known to every boy, that they require no description.

**GOVERNMENT AND VIRTUES.** They are under the dominion of Mercury. The parched kernels made into an electuary, or the milk drawn from the kernels with mead or honeyed water, are very good to help an old cough; and, being parched, and a little pepper added thereto, and taken in drink, digest the distillations of rheum from the head. The dried husks and shells, to the quantity of about two drams, taken in red wine, stay the lasks and women's courses; but the red skin which covers the kernel is much more effectual for the latter purpose.

## HAWKWEED. HIERACIUM.

**DESCRIPTION.** It hath many large leaves lying on the ground, having many deep gashes on the edges, somewhat like those of sow-thistle; from among these riseth up a hollow rough stalk, two or three feet high, branched from the middle upwards. On these are set, at every joint, several leaves cut but very little on the edges, bearing at the top many pale-yellow flowers, consisting of small narrow leaves, broad pointed, and nicked in on the edges, set in a double row, and sometimes more, the outside leaves being the largest. These flowers are turned into down, bearing small brownish seed, which is blown away with the wind. The root is long and rather large, with many small fibres thereat. The whole plant is full of bitter milk.

**PLACE.** It groweth in many places, especially in fields and borders of pathways, in dry grounds.

**TIME.** It blossoms and disperses its down in the summer-months.

**GOVERNMENT AND VIRTUES.** Saturn claims dominion over this herb. Dioscorides says, it is cooling, somewhat dry and binding, and therefore good for the heat and gnawing of the stomach, for inflammations and hot agues. The juice thereof, taken in wine, helpeth digestion, expelleth wind, preventeth crudities from clogging the stomach, and caufeth the easy evacuation of urine; being outwardly applied, it is a sovereign cure for the stinging and biting of venomous beasts, and is good for all poisons. A scruple of the dried juice, taken in wine and vinegar, is profitable for the dropfy; the decoction of the herb, taken with honey, digesteth thin phlegm in the chest and lungs, and, mixed with hyssop, it helpeth the cough. The decoction hereof mixed with that of wild fuccory made with wine, and taken, helpeth the wind-cholic and hardness of the spleen, procureth rest and sleep, preventeth venery, cooleth heats, purgeth the stomach, increaseth blood, and helpeth all diseases of the reins and bladder.

Applied externally, it is a singular remedy for all defects and diseases of the eyes, being used with breast-milk; and is of equal success when administered to fretting and creeping ulcers, if taken in time. The green herb bruised, and mixed with a little salt, is effectual in helping burns, if it be used before the blisters rise; also inflammations, St. Anthony's fire, and all pustules and eruptions, heat and salt phlegm. The same applied with meal and fair water, in the manner of a poultice, to any place affected with convulsions and the cramp, or dislocated members, giveth great help and ease. The distilled water cleanseth the skin from all blemishes. The use of this herb is mostly external, but it is very eminent; it cools, softens, and heals. I saw this year an arm covered with fiery pustules on the one half, and the other with terrible remains of scratching, cured by it in four days; the leaves were beaten to a poultice with bread, milk, and a little oil, and tied round the arm.

#### HAWTHORN. CRATAEGUS.

I DO not mean to trouble my readers with the description of a tree so universally known to almost every inhabitant of this kingdom.

It is generally a hedge-bush; but, by being carefully pruned and dressed, it will grow to a reasonable height. As for the hawthorn tree of Glastonbury, which is said to flower yearly on Christmas-day, it rather shows the superstition of those who entertain this opinion than excites wonder on any other account, since the same may be found in many other places of this kingdom; as at a place called Whitegreen, near Namptwich, in Cheshire; and also in Romney-marsh. These, if the winter happens to be mild, will be in full bloom about Christmas.

GOVERNMENT AND VIRTUES. It is a tree of Mars. The berries, or the seed in the berries, beaten into powder, and drunk in wine, are a singular remedy for the stone, and no less effectual for the dropsy. The distilled water of the flowers stayeth the lask; and the seeds, cleared from the down, then bruised and boiled in wine, will give instant relief to the tormenting pains of the body. If cloths and sponges are wet in the distilled water, and applied to any place wherein thorns, splinters, &c. are lodged, it will certainly draw them forth.

#### HEMLOCK. CONIUM.

DESCRIPTION. THE common great hemlock groweth up with a green stalk four or five feet high, and sometimes higher, full of red spots; at the joints are set very large winged leaves, which are divided into many other winged leaves, set one against another, dented on the edges, and of a sad-green colour. The stalks

stalks are branched towards the top, each bearing umbels of white flowers, which are followed by whitish flat seed. The root is long, white, hollow, and sometimes crooked, of a very strong, heady, and disagreeable, smell.

PLACE. Its growth is not confined to any particular spot in this kingdom, but it may be found by most old walls, hedge-sides, and uncultivated grounds.

TIME. It generally flowereth and seedeth in July.

GOVERNMENT AND VIRTUES. Saturn governs this plant. It is exceeding cold, and of a very dangerous quality; consequently must not be applied internally. It is of good effect for inflammations, tumours, and swellings, of any part of the body, the privities excepted; also St. Anthony's fire, wheals, pushes, and creeping ulcers, proceeding from hot sharp humours, by cooling and repelling the heat. The leaves bruised, and laid to the brow or forehead, are good for those whose eyes are red and swelled, and for cleansing them of web or film growing thereon. If the root is roasted in embers, afterwards wrapped in double wet papers, and then applied to any part afflicted with the gout, it will speedily remove the pain thereof. Should any person, unfortunately, through mistake, eat the herbage of this plant instead of parsley, or the root instead of a parsnip, (both bearing a great resemblance to each other,) it will certainly cause a phrenzy or stupefaction of the senses; I will recommend to the patient the strongest and best wine they can procure, and to drink it immediately, before the ill effects of the herb strike to the heart. If wine cannot be instantly had, Pliny adviseth to take a good draught of strong vinegar, which he affirms to be a sovereign remedy.

#### HEMP. CANNABIS.

IT is so common a plant, and so well known by almost every resident of this kingdom, that a description of it would be altogether superfluous.

TIME. It is sown about the latter end of March, or beginning of April; and is ripe in August and September.

GOVERNMENT AND VIRTUES. It is under the dominion of Saturn. The seed consumeth wind; but, if used too liberally, it drieth up the natural seed for procreation; though, being boiled in milk, and taken a little at a time, it is a good remedy for a dry cough. An emulsion made of the seed is given with good success for the jaundice, especially in the beginning of the disease, if there be no ague accompanying it; for it openeth obstructions of the gall, and causeth digestion of choler; it stayeth lasks and continual fluxes, easeth the cholic, al-layeth the troublesome humours of the bowels, and stayeth bleeding at the mouth, nose, or any other place; it will destroy the worms either in man or beast, and,

by

by dropping the juice into the ears, it will kill the worms, and bring forth earwigs or other insects gotten therein. The decoction of the root allayeth inflammation, easeth the pains of the gout, the hard tumours or knots in the joints, the pains and shrinkings of the sinews, and the pains of the hips. The fresh juice, mixed with a little oil and butter, is an exceeding good cure for burns.

#### HENBANE. HYOSCYAMUS.

**DESCRIPTION.** The common henbane hath very large, thick, soft, woolly, leaves, lying upon the ground, much cut or torn on the edges, of a dark, ill, greyish-green, colour; from among these rise up several thick and short stalks, two or three feet high, spread into many smaller branches with less leaves theron, bearing small yellow flowers, which scarcely appear above the husks; they are usually torn on the one side, ending in five round points growing one above another, of a dead yellowish colour, somewhat paler towards the edges, with many purplish veins, and of a dark yellowish-purple colour at the bottom of the flower, with a small pointel of the same colour in the middle; each of them stands in a hard close husk, somewhat like those of asarabacca, and rather sharp at the top points, containing much small seed, very like poppy-seed, but of a dusky greyish colour. The root is large, white, and thick, branching forth many ways under ground, not much unlike a parsnip, except in colour; and is, together with the plant, of a very strong, disagreeable, and offensive, smell.

**PLACE.** It generally groweth near pathways, and under the sides of hedges and old walls.

**TIME.** It blossoms in July, and springeth annually from its own sowing; though many believe it to flower much earlier.

**GOVERNMENT AND VIRTUES.** It is a Saturnine plant. The leaves are good for cooling hot inflammations in the eyes, or other parts of the body; and, being boiled in wine, and used as a foment, it will assuage all manner of swellings, either in the scrotum, women's breasts, or other parts of the body; also the gout, sciatica, and pains of the joints, if proceeding from a hot cause. Being applied with vinegar to the forehead and temples, it helpeth the head-ach, and causeth those to sleep who are prevented by hot violent fevers. The oil of the seed is good for deafness, and noise and worms in the ears. The juice of the herb or seed, or the oil drawn from the seed, will answer all the aforesaid purposes.

#### HEDGE HYSSOP. GRATIOLA.

**DESCRIPTION.** THERE are several sorts of this plant; the first of which is a native of Italy, and only reared here by the curious. Two or three kinds, however,

grow

grow wild in England, two of which I shall here mention ; viz. The first is a low smooth plant, not quite a foot high, of a very bitter taste, composed of many square stalks diversely branched from the bottom to the top ; it has many joints, shooting forth at each two small leaves ; these are rather broader at the bottom than at the top, a little dented on the edges, of a sad-green colour, and full of veins. The flowers stand also at the joints, being of a fair purple colour with white spots, and made very much like those of dead-nettle ; the seed is small and yellow, and the roots spread much under ground.

The second seldom grows more than half a foot high, shooting forth several small branches, whereon grow many small leaves set one against the other, somewhat broad, but very short ; the flowers are not much unlike the former in shape, but of a pale reddish colour ; the seed is small and yellowish, and the root spreadeth like that of the first.

PLACE. They grow in wet low grounds, and by water-sides ; and the latter sort may be found amongst the bogs on Hampstead Heath.

TIME. They generally flower in June, July, and August ; and the seed ripens presently after.

GOVERNMENT AND VIRTUES. They are under the dominion of Mars ; and very unsafe to take inwardly, unless well rectified by an alchemist, and only the purity of them given, as they are violent purgers, especially of choler and phlegm. Being prepared, they are very good for the dropsy, gout, and sciatica ; externally applied in ointments, or the belly anointed therewith, they will destroy worms therein ; and are an excellent remedy for old and filthy sores.

#### BLACK HELLEBORE. HELLEBORUS.

IT is called also fetter-wort, fetter-graft, bear's-foot, Christmas-herb, and Christmas-flower.

DESCRIPTION. It hath many fair green leaves rising from the root, each of them standing about a span high from the ground ; the leaves are all divided into seven, eight, or nine, parts, dented from the middle to the point on both sides, and remain green all the winter. About Christmas-time, if the weather be somewhat temperate, the flowers appear upon footstalks, each composed of five large round white leaves, which are sometimes purple towards the edges, with many pale yellow thrums in the middle. The seed is divided into several cells somewhat like those of columbines, but rather larger ; the seed is long and round, and of a black colour. The root consists of numberless blackish strings, all united into one head. There is likewise another species of black hellebore,

which frequently grows in woods and forests, very much like this, except that the leaves are smaller and narrower. It perisheth in the winter.

PLACE. The first is cultivated in gardens; the second is commonly found in the woods in Northamptonshire.

TIME. The former blossoms in December and January; and the latter in February and March.

GOVERNMENT AND VIRTUES. It is an herb of Saturn, consequently would be taken with greater safety after being purified than when raw. The roots are very effectual against all melancholic diseases, especially such as are of long standing, as quartan agues and madness; it helpeth the falling sickness, the leprosy, the yellow and black jaundice, the gout, sciatica, and convulsions; or, used as a pessary, provoketh the terms exceedingly. The same being beaten to a powder, and sown upon foul ulcers, consumes the dead flesh, and instantly heals them; it will also help gangrenes, by taking inwardly twenty grains thereof corrected with half as much cinnamon. Country people use it for the cure of such beasts as are troubled with the cough, or have taken any poison, by boring a hole through the ear and putting a piece of the root therein; this, they say, will give relief in twenty-four hours time. It is an excellent ingredient, and used by farriers for many purposes.

#### HERB ROBERT. GERANIUM.

DESCRIPTION. IT grows up with a reddish stalk about two feet high, bearing on long and reddish footstalks many leaves; these are divided at the ends into three or five divisions, some cut deeper than others, and also dented on the edges, which sometimes turn of a reddish colour. At the top of the stalk grow several flowers, each consisting of five leaves, much larger than those of dove's-foot, and of a deeper red colour; after which come beak-heads as in the others. The root is small and thready, and of an unpleasant smell.

PLACE. It may be found almost any-where near the waysides, ditch-banks, &c.

TIME. It flowers in June and July, and the seed is ripe soon after.

GOVERNMENT AND VIRTUES. The herb is under the dominion of Venus. It is esteemed an excellent remedy for the stone; and will stay blood, from whatever cause it might happen to flow. It speedily healeth all green wounds; and is effectual in curing old ulcers in the privities and other parts.

#### HERB TRUELOVE. PARIS.

DESCRIPTION. ORDINARY herb truelove hath a small creeping root running under the upper crust of the ground, somewhat like a couch-grafs-root, but not

not so white, shooting forth stalks with leaves, some of which carry small berries, and others not; every stalk smooth, without joints, and of a blackish-green colour, rising about half a foot high if it bears berries, but not so high if otherwise; on the top are four leaves set directly one against the other, resembling a cross, or rather a ribbon tied in a truelover's knot, from whence it took its name; these leaves are somewhat like the leaves of nightshade, but a little broader, having sometimes three leaves, sometimes five, and frequently six, some of which are larger than others. From the middle of the four leaves riseth up one small slender stalk, about an inch high, bearing on the top a flower spread open like a star, consisting of four long and small narrow-pointed leaves, of a yellowish-green colour, with four smaller ones lying between; and in the middle stands a round dark purplish button or head, compassed about with eight small yellow mealy threads of three colours, which form a beautiful flower; when the other leaves are withered, the button or head in the middle becomes a blackish purple berry about the size of a grape, full of juice, and contains many white seeds. The whole plant is without taste.

PLACE. It grows in woods and coppices, especially about Chislehurst and Maidstone, in Kent; and is likewise frequently found in the corners and borders of fields, and other waste grounds.

TIME. They spring up about April or May, and flower soon after; the berries are ripe in the end of May or June.

GOVERNMENT AND VIRTUES. This plant is claimed by Venus. The leaves or berries hereof are effectual to expel poison of all sorts, especially that of the aconites; also the plague, and other pestilential diseases. The roots beaten to powder and taken in wine, give ease to those who are troubled with the cholic; the leaves are exceeding good for green wounds, as also to cleanse and heal up old filthy sores and ulcers. It is very powerful to discus all tumours and swellings in the scrotum, privities, or groin, or in any other part of the body, and speedily allays all inflammations. The leaves, or juice, applied to felons, or nails of the hands or feet that have imposthumes or sores gathered together at the roots or under them, will prove a certain cure in a short time.

#### HYSSOP. HYSSOPUS.

IT is so universally known, that I consider it altogether needless to write any description of it. Its virtues are these:

TEMPERATURE AND VIRTUES. The herb is Júpiter's, under the sign Cancer; consequently strengthens such parts of the body as these govern. Dioscorides faith, that hyssop boiled with rue and honey, and drunk, helpeth those who are

are troubled with coughs, shortnes of breath, wheezing, and rheumatic distillation of the lungs; taken with oxymel, it expelleth gross humours by stool, and with honey it killeth worms in the belly; also, with fresh or new figs bruised, it helpeth to loosen the belly, but more effectually if the root of flower-de-luce be added thereto. It restorcth the natural colour of the skin when discoloured by the yellow jaundice; and, being taken with figs and nitre, it helpeth the dropfy and spleen. Being boiled in wine, it is good to wash inflammations, and taketh away black-and-blue spots and marks proceeding from blows, bruises, or falls, if applied with warm water. Being boiled with figs, it makes an excellent gargle for the quinsey, or swelling in the throat; or boiled in vinegar and gargled in the mouth, it cureth the tooth-ach; the hot vapours of the decoction taken by a funnel in at the ears, easeth the inflammations and stinging noise of them; bruised and mixed with salt, honey, and cummin-seed, it is a good remedy for the stinging of serpents; the head being anointed with the oil thereof, it killeth the lice and allayeth the itching of the same. It helpeth the falling-sickness, and expelleth tough phlegm, and is effectual in all cold griefs or diseases of the chest and lungs, being taken either as a medicine or a syrup. The green herb bruised, and a little sugar mixed therewith, will speedily heal up any cut or green wound, being thereto applied.

#### HOPS. HUMULUS.

THE matured hops are so well known, that I shall decline writing a description; and shall therefore proceed to that of the wild hops.

**DESCRIPTION.** The wild hop groweth up like the tame, twining upon trees and hedges that stand near it; it hath rough branches and leaves like the former, but much smaller heads; these heads are so scarce, that one stalk seldom produces more than one or two;—in this the chief difference consists.

**PLACE.** They delight to grow on low moist grounds; and are found in most parts of this kingdom.

**TIME.** They spring up in April, and flower about the latter end of June; but the heads are not gathered till the latter end of September.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Mars. This physically operates in opening obstructions of the liver and spleen, cleansing the blood, loosening the belly, expelling the gravel, and provoking urine: the decoction of the tops of hops, whether tame or wild, worketh these effects. In cleansing the blood, they help to cure the French disease, and all manner of scabs, itch, and other breakings-out of the body; also tetterers, ringworms, and spreading sores, the morphew and all discolourings of the skin. The decoction of the flowers and tops helpeth to expel poison.

poison. Half a drachm of the seed in powder, taken in drink, killeth worms in the body, bringeth down women's courses, and expelleth urine. A syrup made of the juice and sugar, cureth the yellow jaundice, easeth the head-ach proceeding from heat, and tempereth the heat of the liver and stomach; it is likewise given with good effect to those who are afflicted with long and hot agues. Both the wild and the manured are of one property, and alike effectual in all the aforesaid disorders. Mars owns this plant, consequently its operations are obvious.

#### HOARHOUND. MARRUBIUM.

**DESCRIPTION.** COMMON hoarhound groweth up with square hoary stalks, about half a yard or two feet high, set at the joints with two round crumpled rough leaves, of a dull hoary-green colour, of a tolerably pleasant smell, but very bitter taste. The flowers are small, white, and gaping, set in rough, hard, prickly, husks; these, together with the leaves, surround the joints from the middle of the stalk upwards, and are succeeded by small, round, blackish, seed. The root is blackish, hard, and woody, with many strings, and very durable.

**PLACE.** It is found in most parts of this kingdom, especially in dry grounds, and waste green places.

**TIME.** It generally blossoms in and about July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** It is an herb of Mercury. A decoction of the dried herb with the seed, or the juice of the green herb taken with honey, is a certain remedy for those who are pursey, or short-winded, or have a cough, or are fallen into a consumption, either through long sicknes, or thin distillations of rheum upon the lungs. It helpeth to expectorate tough phlegm from the chest, being taken with the roots of iris, or orris. It bringeth down the menstrua, expelleth the after-birth, and giveth ease to those who are afflicted with long and painful travail; and is an excellent medicine to expel poison, or cure the venomous bitings or stingings of serpents, &c. The leaves, used with honey, purge foul ulcers, stay running or creeping sores, the growing of the flesh over the nails, and ease the pains of the sides. The juice thereof, used with wine and honey, helpeth to clear the eye-sight, and, snuffed up the nostrils, purgeth away the yellow jaundice; the same used with a little oil of roses, and dropped into the ears, easeth the pains thereof. Galen says, it openeth obstructions both of the liver and spleen, and purgeth the breast and lungs of phlegm: outwardly applied, it both cleanseth and digesteth. Mathiolus also observes a decoction of this plant to be infinitely serviceable for those who have bad livers; and for

such as have itches and running tetter. Either the powder or the decoction hereof is effectual in killing worms. The green leaves, bruised and boiled in old hog's grease, and used as an ointment, heal the bitings of dogs, abate the swellings of women's breasts, and ease the painful swellings occasioned by thorns or splinters; and, used with vinegar, cleanse and heal tetter. There is a syrup made of this plant sold by most apothecaries, which I would recommend as an excellent help to evacuate tough phlegm and cold rheum from the lungs of aged persons, especially those who are asthmatic or short-winded.

#### HORSE-TAIL. *EQUISETUM.*

OF this there are many kinds, but I shall decline troubling my readers with the description of any other than the most eminent.

**DESCRIPTION.** The great horse-tail, at the first springing, hath heads somewhat like asparagus, which afterwards grow to be hard, rough, hollow, stalks, jointed in several places, and about a foot high; the lower part appearing to be put into the upper. On each side grows a bush of small, long, rush-like, hard, leaves, each part resembling a horse's tail, (from whence it took its name.) At the tops of the stalks come forth small catkins, somewhat like those of trees. The root creeps under the ground, having many joints.

**PLACE.** This horse-tail (as do most of the other kinds hereof) generally groweth in moist and wet grounds.

**TIME.** They spring up in April, and their catkins bloom in July; in August they shed their seed, and then perish, rising afresh every spring.

**GOVERNMENT AND VIRTUES.** Of this herb, the smooth rather than the rough, and the leafed rather than the bare, are most physical. Saturn claims dominion over it, yet its qualities are very harmless. It is very good to staunch bleedings, either inwardly or outwardly, the juice or decoction thereof being drunk, or externally applied. It stays lasks and fluxes of every kind, either in men or women; suppresses the evacuation of blood through the urinary passages, and healeth not only the inward ulcers and excoriations of the entrails, bladder, &c. but all other sorts of foul, moist, and running, ulcers, and quickly healeth green wounds. It is an excellent cure for ruptures in children. The decoction taken in wine, provoketh urine, and helpeth the stone and strangury; and a small quantity of the distilled water thereof, drunk two or three times in a day, easeth the disagreeable sensations of the bowels, and is effectual against a cough when proceeding from the distillation of the head. By bathing the parts affected with

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the warm juice or distilled water of this plant, it cureth hot inflammations, pustules, red wheals, and other breakings-out, of the skin; and it easeth all swellings, heat, and inflammations, of the fundament and privities of either sex.

#### HOUSELEEK. *SEMPERVIVUM.*

IT is too well known, as well by the name of sengreen as houseleek, to require any description.

PLACE AND TIME. It grows commonly on the tops of houses and walls, and flowereth in July.

GOVERNMENT AND VIRTUES. Jupiter claims dominion over this herb; from which it is fabulously reported, that it preserves whatever it grows upon from fire and lightning. The ordinary houseleek is good for all inward and outward heats, either in the eyes or other parts of the body. A posset made with the juice of houseleek is singularly good in all hot agues, for it cooleth and tempereth the blood and spirits, and quencheth thirst; by dropping the juice thereof into the eyes, it cureth them of all hot fluxions of sharp and salt rheums, and is equally effectual for all disorders of the ears, being used in the same manner. It stoppeth the immoderate floodings of the menstrua, and helpeth the humours of the bowels; it cooleth and abateth all hot inflammations, the St. Anthony's fire, scaldings, burnings, the shingles, fretting ulcers, cankers, tetterers, ring worms, and the like; and is a certain ease to those who are afflicted with gout when proceeding from a hot cause. By bathing the hands and feet with the juice, and laying the skin of the leaves on them afterwards, it cleanseth them of warts and corns; it also easeth the head-ach, and distempered heat of the brain, occasioned by phrenesies or want of sleep, being applied to the temples and forehead. The leaves, bruised and laid upon the crown of the head, stay the bleeding of the nose very quickly; the distilled water of the herb is likewise profitable for all the aforesaid purposes. The leaves, being gently rubbed on any place stung with nettles or bees, do quickly take away the pain, and discharge the blisters proceeding therefrom.

#### HOLLY. *ILEX.*

CALLED also holm or hulver-bush. It is so well known, that to give a description of it is quite needless.

GOVERNMENT AND VIRTUES. This tree is of a Saturnine quality; the berries expel wind, and are therefore esteemed good for removing the pains of the cholick; they are of a strong nature; for, by eating a dozen of them in the morn-

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ing fasting, when they are ripe, and not dried, they purge the body of gross and clammy phlegm ; but if you dry the berries, and beat them into powder, they are binding ; they stop fluxes of every kind, and also the terms of women. Both the bark and leaves are exceeding good to be used in fomentations for broken bones and dislocated members.\*

#### HOUND's-TONGUE. CYNOGLOSSUM.

**DESCRIPTION.** THE great ordinary hound's-tongue hath many long and somewhat narrow, soft, hairy, darkish-green leaves, lying on the ground, and not much unlike those of bugloss ; from among these riseth up a rough hairy stalk, about two feet high, with smaller leaves thereon, and branching at the top into many parts, bearing at the foot of each a small leaf ; on this branch are many small flowers, which consist of small purplish-red leaves, of a dead colour, scarcely rising out of the husk wherein they stand, with a few threads in the middle. It hath sometimes a white flower. After the flowers are fallen, there follow rough flat seeds, with a small pointel in the middle, easily cleaving to any thing it happens to touch. The branch whereon these flowers grow is crooked, or turned inwards, before they are in blossom, but straightens itself as the flowers come to perfection. The root is black, thick, and long, hard to break, and full of clammy juice, smelling somewhat strong and disagreeable, as also do the leaves.

**PLACE.** It groweth in most parts of this kingdom, in waste grounds, untilled places, highway-sides, and under hedges.

**TIME.** It generally flowereth in the months of May and June, and the seed is ripe shortly after.

**GOVERNMENT AND VIRTUES.** It is a plant under the dominion of Mercury. The root is very effectually used in pills and decoctions, or otherwise, to stay all sharp and thin defluxions of rheum from the head into the eyes or nose, or upon the stomach or lungs ; as also for coughs and shortness of breath. The leaves boiled in wine, (though many approve of water,) with oil and salt added thereto, mollify and open the belly downwards, and help to cure the biting of a mad dog, by applying the leaves to the wound. Bruising the leaves, or the juice of them

\* The method of making Birdlime.—Peel as much of the bark of holly as you have occasion for, in the months of June and July ; let it boil seven or eight hours, or till it is tender, in clear water ; then make a heap with fern, strewing a lay of one and a lay of another. This sort of position the chemists term *stratum super stratum*, and mark it thus, S. S. S. Let it ferment a fortnight or three weeks ; then take it out, and beat it in a mortar till it may be kneaded like dough ; then wash it in water till it becomes birdlime.—This is pure birdlime.

boiled

boiled in hog's lard, and applied, helpeth to preserve the hair from falling, and easeth the pain of a scald or burn; or the bruised leaves, laid to any green wound, speedily heal the same. The root baked in embers, wrapped in paste or wet papers, or in a wet double cloth, and a suppository made thereof and applied to the fundament, doth very effectually help the piles or hemorrhoids; also the distilled water of the herb and root is used with good effect for all the aforesaid purposes, either taken inwardly or applied outwardly, especially as a wash for wounds and punctures, and particularly ulcers occasioned by the venereal disease.

St. JOHN'S WORT. HYPERICUM.

DESCRIPTION. THE common St. John's wort shooteth forth brownish, upright, hard, round, stalks, two feet high, spreading many branches from the sides up to the top, with two small dark-green leaves set one against the other, somewhat like those of the smaller centaury, but narrower, and full of small holes, which can scarcely be discerned unless held up towards the light. At the tops of the stalks and branches stand yellow flowers, each composed of five leaves, with many yellow threads in the middle, which, being bruised, yield a reddish juice like blood; these are succeeded by small round heads containing small blackish seed, smelling like rosin. The root is hard and woody, with many strings and fibres, and of a brownish colour; they live many years, shooting afresh yearly.

PLACE. It groweth in woods and coppices, as well those that are shady as those that are open and exposed to the sun.

TIME. They flower about midsummer, and their seed is ripe in the latter end of July and August.

GOVERNMENT AND VIRTUES. It is under the celestial sign Leo, and governed by the Sun. It is by no means the least valuable for its efficacy in the cure of wounds, hurts, or bruises, by being boiled in wine and drunk, if the complaint is inwardly, or, if outwardly, by converting it into an oil, ointment, bath, or lotion. It opens obstructions, dissolves swellings, closes up the lips of wounds, and strengthens the parts that are weak and feeble. The decoction of the herb and flowers, (though that of the seed is preferable,) taken in wine, or the seed made into powder and drunk with the juice of knot-grafts, helpeth all manner of vomiting and spitting of blood, occasioned by the bursting of a vein, bruises, falls, &c. It likewise helpeth those who are bitten and stung by any venomous creature; also easeth the pain of the stone, and provoketh women's courses. Two drams of the seed of this herb, beaten to powder and drunk in a little broth, gently expel choler or congealed blood from the stomach. The decoction

of the leaves and seeds, being drunk rather warm before the ague-fits come on, in the course of a little time will entirely remove them. Drinking the decoction of the seed for forty days together helpeth the sciatica, the falling-sickness, and the palsey.

#### IVY. *HEDERA.*

THIS is too well known to require a description.

PLACE. It may be found upon most old stone walls of churches, houses, and ruinous buildings; and frequently in woods and upon trees.

TIME. It flowereth in July; but the berries do not ripen till they have felt the winter-frosts.

GOVERNMENT AND VIRTUES. It is under the dominion of Saturn. Dioscorides recommends about a dram of the flowers to be taken twice a-day in red wine, as an excellent medicine for the lask and bloody flux. It is very pernicious to the nerves and sinews, being taken too liberally, but particularly helpful when externally applied. Pliny observes, that the yellow berries are good against the jaundice, and help those who spit blood; also prevent drunkeyness; and that the white berries, being either inwardly or outwardly applied, kill the worms in the belly. The same beaten to powder, and taken in liquor for two or three days together, admirably help those who have the plague; or, taken in wine, break the stone, provoke urine, and bring down the menstrua. The fresh leaves of ivy, boiled in vinegar, and applied warm to the side of those that are troubled with the spleen, ach, or stitch in the side, give immediate ease; or, used with rose-water and oil of roses to bathe the temples and forehead, ease the head-ach, though of long continuance. The same, boiled in wine, cleanse and heal old and filthy ulcers, by using it as a wash; it is likewise an excellent cure for green wounds, burnings, scaldings, and all kinds of exulcerations coning thereby, or by salt phlegm or humours in other parts of the body. The juice of the berries or leaves snuffed up the nose, purgeth the head and brain of thin rheum which causeth defluxions into the eyes and nose, and cureth the ulcers and stench therein; the same, dropped into the ears, helpeth the old running sores of them. By the continual drinking out of a cup made of ivy, all symptoms of the spleen are entirely erased. The speediest cure for a surfeit by wine, is to drink a draught of the same liquor wherein a handful of bruised ivy-leaves have been boiled.

#### JUNIPER-BUSH. *JUNIPERUS.*

THIS is equally as well known as the former; consequently a description would be needless

PLACE. They are very plentiful in most woods and commons, particularly upon Warley-common, near Brentwood, in Essex ; upon Finchley-common, without Highgate ; adjacent to the Newfoundland Wells, near Dulwich ; upon a common between Mitcham and Croydon ; in the highway near Amersham, in Buckinghamshire ; and in many other places.

TIME. The berries are not ripe the first year, but continue green two summers and one winter before they ripen, when they change their colour to black ; they are ripe about the fall of the leaf.

GOVERNMENT AND VIRTUES. This admirable solar shrub can scarcely be equalled for its virtues. Its berries are hot in the third degree, and dry in the first, being an excellent counter-poison and a great resister of pestilence ; they are very good for the bitings of venomous beasts ; they provoke urine exceedingly, and therefore are very available in disuries and stranguries. It is so powerful a remedy for the dropsy, that, by drinking only the lye made of the ashes of this herb, it cures the disease ; it provokes the terms, helps the fits of the mother, strengthens the stomach, and expels wind ; indeed there are few better remedies for the wind and cholic than the chemical oil drawn from the berries ; but, as many, in all probability, would be at a loss how to extract this oil, I would advise them to eat ten or a dozen of the ripe berries every morning fasting, as these will occasionally answer the aforesaid purposes ; they are also good for a cough, shortness of breath, consumption, pains in the belly, ruptures, cramps, and convulsions ; they strengthen the brain, help the memory, fortify the sight by strengthening the optic nerves, and give safe and speedy delivery to women in labour ; they are excellent good in all sorts of agues ; they help the gout and sciatica, and strengthen all the limbs of the body. The ashes of the wood are a special remedy for the scurvy in the gums, by rubbing them therewith ; the berries stay all fluxes, help the hemorrhoids or piles, and kill worms in children ; they break the stone, procure lost appetite, and are very good for palfies and falling sickness. A lye made of the ashes of the wood, and the body bathed therewith, cures the itch, scabs, and leprosy.

#### JUJUBE-TREE. RHAMNUS ZIZYPHUS.

NAMES AND KINDS. DODONEUS says, there are two sorts of jujubes, red and white ; and of the red three different kinds, viz. the greater jujube-tree, called in Latin *zizyphus syriaca major* ; the lesser jujube, called *zizyphus syriaca minor* ; and the wild jujube-tree, *zizyphus sylvestris*.

DESCRIPTION. The greater jujube-tree grows sometimes very high, but oftener spreads itself in breadth, having a crooked body ; the wood is hard and whitish,

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the bark rugged; and the branches great and spreading; the smaller twigs, about a foot long, are full of leaves on both sides, one a little above another, and an odd one at the end; these leaves are small, broad, and pointed at the end; finely dented about the edges, with long veins in them, each standing on a long foot-stalk, smooth, and feel hard. At the foot of every leaf, towards the tops of the twigs, come forth small yellowish flowers, each consisting of five leaves; these are succeeded by the fruit, which is somewhat like a small plumb, or olive, but rather long, green and harsh at the first; afterwards they become yellowish, and when ripe they are of a fine red colour, of a sharp sweetnes, and somewhat clammy; flattish next the stalk, containing a stone not unlike that of the olive or Cernelian cherry; and its skin is thicker and harder than that of the plumb. The branches are thorny, standing two always at a joint, one whereof is crooked, the other straight; the roots are long and fast in the earth.

The smaller jujube-tree is in branches, leaves, flowers, and fruit, very much like the former, except that it is every-way somewhat smaller; it is also thick set with thorns like the other, but these are rather shorter.

The wild jujube-tree is lower, and more like a shrub, than either of the former, but thicker set with small sharp thorns; the leaves are not unlike, but grow not so thick on a twig, and are smaller; the fruit of this is also red, somewhat less, drier of substance, and of a sharper taste, than the other.

PLACE. The first groweth naturally in Africa, Egypt, and most eastern countries; and was, as Pliny observes, conveyed from thence into Italy, where it now grows in great plenty. The other kinds are likewise found in Italy, and in some parts of France; the wild kind growing in the fields and hedges.

TIME. They flower in May, and their fruit is generally ripe in September.

GOVERNMENT AND VIRTUES. Venus claims dominion over these. Jujube-berries, when fresh, open the body, purge choler, and cleanse the blood, as Si-mon Sethi and Aetuaris affirm, though Mathiolus positively denies their purging faculty. They are of a temperate quality in heat and moisture; they cool the heat and sharpnes of the blood, and therefore are good in hot agues, also to expellorate tough phlegm and other diseases of the chest and lungs, as coughs, shortnes of breath, hot distillations, &c. and, being taken in syrups and electuaries, expel the roughnes of the throat and breast. They are good to cleanse the reins and bladder, their viscous qualities making the passages slippery, and expelling the gravel and stone with infinitely less pain; and stay vomiting when caused by sharp humours. They are hard of digestion, being either fresh or dry, and therefore are used in decoctions, syrups, or electuaries. I shall here present my readers with a most valuable receipt

for

for the cure of all sharp humours, ulcers, or inflammations, in the kidneys, reins, and bladder; and for the stone, jaundice, falling-sickness, and dropsy.—It is thus prepared: Take jujubes, the seed of parsley, fennel, anise, and carraways, of each one ounce; of the roots of parsley, burnet saxifrage, and carraway, one ounce and a half; let the seed be bruised, and the roots washed and cut small; then infuse them all night in a bottle of white wine, and in the morning boil it in a close earthen vessel until a third part be consumed; strain it, and drink four ounces at a time, the first and last thing morning and evening; abstaining from all other drink for at least three hours. This you will find effectual for the aforesaid disorders.

#### HONEY-WORT. CERINTHE.

THERE are divers species of honey-wort; namely, the great, small, and rough; as, the greater yellow and red, the greater yellow or purple, and the smaller yellow and white; the flowers of all or either of which bees are remarkably fond of, and hence the name.

DESCRIPTION. The greater honey-wort groweth up upon a thick green stalk, to a moderate height, having many great deep-pointed green leaves, placed one above another; towards the top of each stalk come umbels of flowers, thick set, and rising up spiral or crested; mostly of a bright-yellow colour; though some are red, others purple, and some perfectly white.

PLACE. The honey-worts grow not wild in England, but are cherished up in gardens, and planted in the pleasure-grounds of the curious.

TIME. They spring up in April, and flower from the latter end of May to August; but perish in the winter.

GOVERNMENT AND VIRTUES. Honey-worts are under Mercury. They are of a temperate quality, between cold and hot; but rather inclined to cold, and are somewhat astringent. They stop bleeding at the mouth and nose, immoderate fluxes of the belly, and women's courses. The juice of the herb, with a little saffron dissolved in it, is an excellent remedy for weak, watery, or blear, eyes; and is used to heal foul ulcers after they have been cleansed, particularly in tender parts of the body. Some people use it instead of bugloss and borage, in all cases where those herbs are recommended. The flowers are very sweet.

#### INDIAN LEAF. LAURUS CASSIA.

NAMES. IT is called by the Indians *cadegi Indi*, that is, *folium Indicum*. It is also called *malabathrum*, and by the East-Indians *tamala patra*.

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**DESCRIPTION.** They are broad leaves, composed of three ribs, and a little pointed at the ends; amongst these are other leaves which sometimes grow on their branches, two usually at a joint, tasting somewhat hot, like the bay-leaf, as does likewise the bark; among these leaves is sometimes found a small fruit very much resembling an acorn in the cup; this is probably the fruit of the tree, and gathered with the leaves.

**GOVERNMENT AND VIRTUES.** It is a solar plant; the virtues of it are these: it provokes urine, it warms and strengthens the stomach exceedingly, and makes the breath sweet. It is good to put into cordial and stomachic compositions; it resisteth poison and venom, and the infusion thereof in warm wine helpeth inflammations and redness of the eyes.

#### KIDNEY-WORT. SAXIFRAGA.

**CALLED** also wall-pennyroyal, and wall-pennywort.

**DESCRIPTION.** It hath many thick, flat, and round, leaves, growing from the root, every one having a long footstalk fastened underneath about the middle of it, a little unevenly waved sometimes about the edges, of a pale-green colour, and hollow on the upper side, like a saucer. From among these rise one or more tender, hollow, smooth, stalks, about half a foot high, bearing thereon two or three small leaves, not round like those below, but somewhat long, and divided on the edges; the tops are sometimes divided into long branches, bearing a number of flowers, set round about a long spike, one above another; they are hollow, shaped like a small bell, and of a whitish-green colour; these are followed by small heads, containing a very small brownish seed, which, falling on the ground, springeth up in great plenty before the winter, if it happens to fall on a moist soil. The root is round and smooth, greyish without and white within, having small fibres at the head of the root and bottom of the stalk.

**PLACE.** It grows in great abundance in many parts of this kingdom, particularly in the western, upon stone and mud walls, upon rocks and stony ground at the foot and often on the trunks of rotten trees.

**TIME.** It usually flowereth in the beginning of May, and the seed, ripening quickly after, sheddeth itself. About the end of the same month the leaves and stalks begin to wither, and remain in that state till September, when the leaves spring up again, and abide green all the winter.

**GOVERNMENT AND VIRTUES.** Venus claims this herb under Libra. The juice or distilled water being drunk, is very effectual for all inflammations and unnatural heats; also to cool a fainting stomach, a hot liver, or heat in the bowels.

bowels. The bruised herb or the distilled water thereof, applied to pimples, redness, St. Anthony's fire, or other inflammations proceeding from heat, quickly healeth the same; it likewise easeth the pains of the kidneys occasioned by the fretting of the stone, provokes urine, is available for the dropsy, helpeth to break the stone, cooleth inflamed parts, easeth the pains of the bowels, and stoppeth the bloody flux. It is a singular remedy for the painful piles, or hemorrhoidal veins, by bathing the affected parts with the juice thereof, or using it as an ointment; and is effectual in easing pains of the hot gout, the sciatica, and the inflammations and swellings of the scrotum; it cureth the kernels or knots in the neck or throat, called the king's evil; it healeth kibes and chilblains by washing them with the juice, or anointing them with an ointment made thereof, laying at the same time some of the skin of the leaf upon them. It is also used in green wounds, to stay the blood and heal them.

#### KNAP-WEED. *CENTAUREA.*

**DESCRIPTION.** THE common sort of knap-weed hath many long and somewhat-broad dark-green leaves, rising from the root, deeply dented about the edges, and sometimes a little rent or torn on both sides in two or three places, and somewhat hairy; from among these groweth up a strong round stalk, four or five feet high, which is divided into many branches: at the tops of these stand large green scaly heads, bearing in the middle many dark purplish red thrums or threads; these are succeeded by black seed, wrapped in down, somewhat like those of the thistle, but smaller. The root is white, hard, and woody, with many fibres annexed thereto; it perisheth not, but liveth during the winter, shooting forth fresh leaves every spring.

**PLACE.** It grows frequently in fields and meadows, but chiefly in borders and hedges; and may be found on waste grounds.

**TIME.** It is generally in blossom about June and July, and the seed is ripe shortly after.

**GOVERNMENT AND VIRTUES.** Saturn claims dominion over this herb. It helpeth to stay fluxes, bleeding at the nose and mouth, or other outward parts, and closeth broken blood-vessels; it stayeth the distillations of thin and sharp humours from the head upon the stomach and lungs; it is good for those who are bruised by a fall, blow, or otherwise; it is very profitable for ruptures, by drinking the decoction of the herbage and root in wine, and applying the same outwardly to the place; it is exceeding good for all running sores, cancerous and fistulous, drying up the moisture, and healing them gradually; and is an admirable remedy for a sore throat, swelling of the uvula and jaw, and all green wounds.

KNOT-

## KNOT-GRASS. POLYGONUM.

IT is so universally known, that a description would be quite unnecessary.

PLACE. It grows in almost every part of this kingdom, by the highway-sides, by the footpaths in fields, and by the sides of old walls.

TIME. It grows up late in the spring, and remains green till the winter, when all the branches perish.

GOVERNMENT AND VIRTUES. Saturn appears to have dominion over this herb, though many are of opinion it is influenced by the Sun. The juice of the common kind of knot-grass is very effectual to stay bleeding at the mouth and nose, by drinking it in steeled or red wine for the one, or applied to the forehead or squirted up the nostrils for the other. It is no less effectual to cool and temper the heat of the blood and stomach; also to stay fluxes of blood and humours, as the lask, bloody flux, women's courses, and running of the reins. It is a singular provocative of urine; it helps the strangury, and allayeth the heat proceeding therefrom; and, by taking a dram of the powder of the herb in wine for several days together, it powerfully expels the gravel or stone from the kidneys and bladder. Being boiled in wine and drunk, it healeth the wounds made by the bitings of venomous creatures, effectually stays all defluxions of rheumatic humours upon the stomach, kills the worms in the belly, and eases the inward pains that proceed from the heat, sharpnes, and corruption of blood and choler. The distilled water of this herb taken by itself, or with the powder of the plant or seed, will equally answer all the aforesaid purpofes, and is held in high estimation for its admirable efficacy in cooling all manner of inflammations, breakings-out, hot swellings and imposthumes, gangrenes, fistulous cankers, ulcers and sores in the privities of either sex, and all kinds of fresh and green wounds, and quickly healing them, being washed therewith. The juice, dropped into the ears, cleanseth such as are foul and have running matter therein; and is very good for broken joints and ruptures.

## KALI. SALIFOLIA.

NAMES AND KINDS. IT is called also glafs-wort and salt-wort; there are four kinds of kali described by Parkinson, viz. 1. *Kali majus cochleatum*, great glafs-wort, with fnail-like seed. 2. *Kali minus album*, small glafs-wort. 3. *Kali  $\mathcal{E}$ gyptiacum*, glafs-wort of Egypt. 4. *Kali geniculatum*, *five Salicornia herbacea*, jointed glafs-wort. I shall only describe the last.

This jointed kali or glafs-wort groweth up usually but with one upright, round, thick, and almost transparent, stalk, a foot high or more; thick set, and full of joints or knots, without any leaves at all, but shooting forth joints one out of another, with short

short cods at the heads of them, and such-like smaller branches on each side, and they are divided into other smaller ones. It is thought to bear neither flower nor seed; the root is small, long, and thready. Some other kinds there are, differing somewhat in the form of the joints; and one kind wholly reddish, and differing from the other in nothing else.

The first and third are absolute strangers in our countries, but grow in Syria, Egypt, Italy, and Spain. The second groweth, not only in those countries, but in colder climates, upon many places of our own coasts, especially of the west country. The last generally groweth in all countries, in many places of our sea-coast, where the salt-water overfloweth.

TIME. They all flourish in the summer; and those that perish give their seed in August, or later; the last abideth all the winter.

GOVERNMENT AND VIRTUES. All the sorts of kali, or glaſſe-wort, are under the dominion of Mars; they are all of a cleansing quality, without any great or manifest heat; the powder of any of them, or the juice, which is much better, taken in drink, purgeth downwards phlegmatic, waterish, and aduſt, melancholy humours, and therefore is very effectual for the dropsy, to provoke urine, and expel the dead child. It opens stoppings of the liver and spleen, and wastes the hardness thereof; but it must be used with discretion, as a great quantity is dangerous, hurtful, and deadly. The ashes are very sharp and biting like a cauſtice, and the lye that is made thereof is so strong, that it will fetch off the ſkin from the hands or any part of the body, but may be mixed with other more moderate medicines to take away ſcabs, leproſy, and to cleanse the ſkin: the powder of ſtones, and the ashes hereof, being melted, are the matter whereof glaſſe is made, which, when it gloweth in the furnace, caſteth up a fat matter on the top, which when it is cold is fat and brittle, and is called *sandiver*.

It worketh much to the ſame effect with the herb or ashes; it is uſed often in powder to blow into horses' eyes, or, being diſſolved, to be ſquirted into them, to take away any ſuperfluouſ film or ſkin beginning to grow thereon; both of them likewiſe ſerve to dry up running ſores, ſcabs, tetter, ringworms, and to help the itch.

#### LADIES' MANTLE. ALCHEMILLA.

DESCRIPTION. IT hath many leaves, riſing from the root, ſtanding upon long hairy footſtalks, being almost round, but a little cut on the edges, into eight or ten parts, more or leſs, making it ſeem like a ſtar, with ſo many corners and points, and indented round about, of a light-green colour, ſomewhat hard in handling, as if it

were folded or plaited at first, and then crumpled in divers places; and a little hairy, as the stalk is also, which riseth up among them to the height of two or three feet, with fuch-like leaves thereon, but smaller; and, being weak, is not able to stand upright, but bendeth down to the ground, divided at the top into two or three small branches, with small and yellowish-green heads, and flowers of a whitish colour breaking out of them, which being past, there cometh small yellow seed like poppy-seed; the root is somewhat long and black, with many strings or fibres.

PLACE. It groweth naturally in many pastures and woodsides in Hertfordshire, Wiltshire, and Kent, and other places of this land.

TIME. It flowereth in May and June, and remains green all the winter.

GOVERNMENT AND VIRTUES. Venus claims the herb as her own. Ladies' mantle is very proper for those wounds that have inflammation, and is very effectual to stay bleedings, vomiting, fluxes of all sorts in men or women, and bruises by falls or otherwise, and helpeth ruptures; it is also good for some disorders in women's breasts, causing them to grow less and hard, being both inwardly and outwardly applied. The distilled water, taken for twenty days together, helpeth conception; and a bath made of the decoction of the herb will sometimes prevent miscarriages. It is one of the most useful wound-herbs, and therefore highly prized and praised by the Germans, who, in all wounds, inward and outward, drink the decoction thereof, and wash the wounds therewith, or dip tents therein, and put them into the wounds. It quickly healeth green wounds, not suffering any corruption to remain behind; and it cureth old sores, though fistulous and hollow.

#### LAVENDER. LAVANDULA.

IT is so well known, being an inhabitant of almost every garden, that it needeth no description.

TIME. It flowereth about the end of June and the beginning of July.

GOVERNMENT AND VIRTUES. Mercury owns this herb, and it carries its effects very potently. Lavender is of special use for pains in the head and brain that proceed of a cold cause, as the apoplexy, falling sickness, the drowsy or sluggish malady, cramps, convulsions, palsies, and often faintings. It strengthens the stomach, and freeth the liver and spleen from obstructions; provoketh women's courses, and expelleth the dead child and after-birth. The flowers of lavender steeped in wine are efficacious in obstructions of urine, or for those troubled with the wind or cholic, if the places be bathed therewith. A decoction made of the flowers of lavender, hoarhound, fennel, and asparagus roots, and a little cinnamon, is used to help the falling sickness and giddiness of the brain; to gargle the mouth with the decoction

decoction thereof is good for the tooth-ache. Two spoonfuls of the distilled water of the flowers taken, help them that have lost their voice; as also the tremblings and passions of the heart, and faintings and swoonings, not only being drunk, but applied to the temples or nostrils; but it is not safe to use it where the body is replete with blood and humours, because of the hot and subtle spirits wherewith it is possessed. The chemical oil drawn from lavender, usually called oil of spike, is of so fierce and piercing a spirit, that it is cautiously to be used, some few drops being sufficient to be given with other things, either inwardly or outwardly.

#### LAVENDER-COTTON. SANTOLINA.

IT being a common garden-herb, I shall forbear the description; only take notice that it flowereth in June and July.

GOVERNMENT AND VIRTUES. It is under the dominion of Mercury. It resisteth poison, putrefaction, and helps the bitings of venomous beasts: a dram of the powder of the dried leaves, taken every morning fasting in any convenient vehicle, stops the running of the reins of men, and whites in women: the seed being beaten into powder, and taken as wormseed, kills worms: the like doth the herb itself, being boiled in milk, and the milk drunk; scabs and itch are cured by bathing with a decoction of it.

#### LADIES' SMOCK, OR CUCKOO-FLOWER. CARDAMINE.

DESCRIPTION. THE root is composed of many small white threads, from tender dark-green leaves, set one against another upon a middle rib, the greatest being at the ends, amongst which rise divers tender, weak, round, green stalks, somewhat streaked, with longer and smaller leaves upon them; on the tops of which stand flowers, almost like stock-gilliflowers, but rounder and not so long, of a blushing white colour: the seed is reddish, and groweth in small pouches, being of a sharp biting taste, and so is the herb.

PLACE. They grow in moist places, and near to brook-sides.

TIME. They flower in April or May, and the lower leaves continue green all the year.

GOVERNMENT AND VIRTUES. They are under the dominion of the Moon, and very little inferior to water-cresses in all their operations. They are very good for the scurvy; they provoke urine and break the stone, and excellently warm a cold and weak stomach, restoring lost appetite and helping digestion.

#### LETTUCE.

## LETTUCE. LACTUCA.

**GOVERNMENT AND VIRTUES.** THE Moon owns it. The juice of lettuce mixed or boiled with oil of roses, and applied to the forehead and temples, procureth sleep, and easeth the head-ache proceeding from a hot cause; being boiled and eaten, it helpeth to loosen the belly: it helpeth digestion, quencheth thirst, increaseth milk in nurses, easeth griping pains of the stomach or bowels that come of cholera. It abateth bodily lust, being outwardly applied with a little camphire; applied in the same manner to the region of the heart, liver, or reins, or by bathing the said place with the juice or distilled water wherein some white fanders or red roses are put also, it not only reppresseth the heat and inflammation therein, but comforteth and strengtheneth those parts, and also tempereth the heat of urine. Galen adviseth old men to use it with spices; and, where splices are wanting, to add mint, rocket, and fuci-like hot herbs, or else citron, lemon, or orange, seeds, to abate the cold of the one and heat of the other. The seed and distilled water of the lettuce work the like effects in all things: but the use of lettuce is chiefly forbidden to those that are short-winded, or have any imperfection in their lungs, or spit blood.

## WATER-LILY. NYMPHÆA.

OF this there are two principal noted kinds, viz. the white and the yellow.

**DESCRIPTION.** The white lily hath very large and thick dark-green leaves lying on the water, sustained by long and thick footstalks, that rise from a great, thick, round, and long, tuberous black root, spongy or loose, with many knobs thereon-like eyes, and whitish within; from the midst of which rise other the like thick and great stalks, sustaining one large white flower thereon, green on the outside, but as white as snow within, consisting of divers rows of long and somewhat thick and narrow leaves, smaller and thinner the more inward they be, encompassing a head within, with many yellow threads or thrums in the middle, where, after they are past, stand round poppy-like heads, full of broad, oily, and bitter, seed.

The yellow kind is little different from the former, only it hath fewer leaves on the flowers, greater and more shining seed, and a whitish root both within and without: the roots of both being somewhat sweet in taste.

**PLACE.** They are found growing in great pools and standing waters, and sometimes in slow running rivers, and ditches of running waters, in sundry places of this land.

**TIME.** They flower most commonly about the end of May, and their seed is ripe in August.

**GOVERNMENT AND VIRTUES.** The herb is under the dominion of the Moon, and therefore cools and moistens like the former. The leaves and flowers of the water-lilies are cold and moist, but the root and seed are cold and dry; the leaves cool all inflammations, and both outward and inward heats of agues, and so do the flowers.

### WHITE LILIES. LILIUM.

IT being unnecessary to describe a plant so common as to be met with in almost every flower-garden, suffice it to detail their

**GOVERNMENT AND VIRTUES.** They are under the dominion of the Moon, and by antipathy to Mars expel poison; they are exceedingly useful in pestilential fevers, the roots being bruised and boiled in wine, and the decoction drunk, expelling the poison to the exterior parts of the body; the juice of it, being tempered with barley-meal baked, and eaten as ordinary bread, is an excellent cure for the dropsy. An ointment made of the root with hog's-lard, is exceedingly good for scald heads, and unites the sinews when cut; it has also great virtue in cleansing ulcers, it being of a fine suppurating quality; the root, boiled in any convenient decoction, gives speedy delivery to women in travail, and expels the after-birth. The root, roasted and mixed with a little hog's-lard, makes an excellent poultice to ripen and break plague-fores. The ointment is also extremely good for swellings in the privities, and cures burns and scalds without leaving any scar, and is a preventative against baldness.

The decoction of the white or yellow lilies, made of the seeds, root, or leaves, is singularly efficacious in restraining nocturnal pollution, occasioned by dreams.

### LILY OF THE VALLEY. CONVALLARIA.

**CALLED** also conval lily, May lily, and lily confancy.

**DESCRIPTION.** The root is small, and creepeth far in the ground, as grafts-roots do; the leaves are many; amongst which riseth up a stalk half a foot high, with many white flowers like little bells, with turned edges, of a strong though pleasing smell; the berries are red, and not much unlike those of asparagus.

**PLACE.** They grow plentifully upon Hampstead-heath, and in various other places in the kingdom.

**TIME.** They flower in May, and the seed is ripe in September.

**TEMPERATURE AND VIRTUES.** It is under the dominion of Mercury, and therefore, without doubt, strengthens the brain, renovates a weak memory, and makes it strong again. The distilled water, dropped into the eyes, helps inflam-

mations thereof, as also that infirmity which they call pin and web; the spirit of the flowers, distilled in wine, restoreth lost speech, helps the palsy, and is exceeding good in the apoplexy, comforteth the heart and vital spirits. Gerrard saith, that the flowers being close stopped up in an ant-hill, and taken away again a month after, a liquor will be found in the glafs, which, being externally applied, tends to relieve the gout.

### L I Q U O R I C E. GLYCYRRHIZA.

**DESCRIPTION.** THE English liquorice shoots up with several woody stalks, whereon are set, at several distances, many narrow long green leaves, set together on both sides of the stalks, and an odd one at the end, nearly resembling a young ash-tree sprung up from the seed. This, by many years continuance in a place without removal, but not else, will bring forth numerous flowers, standing together spike-fashion, one above another upon the stalks, in the form of pea-blossoms, but of a very pale blue colour, which turn into long, somewhat flat, and smooth, pods, wherein is contained small, round, hard, seed. The root runneth down exceeding deep into the ground, with divers other smaller roots and flowers growing with them; they shoot out suckers in every direction, by which means the product is greatly increased. The root is of a brownish colour on the outside, and yellow within.

**PLACE.** It is planted in fields and gardens in divers places of this kingdom, greatly to the profit of the cultivators.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Mercury. Liquorice boiled in clear water, with some maiden-hair and figs, maketh a good drink for such as are troubled with a dry cough, hoarseness, wheezing, or shortnes of breath, and for all complaints of the breast and lungs, phthifick, or consumptions, caused by the distillation of salt humours on them. It is also good in all pains of the reins, the strangury, and heat of urine. The fine powder of liquorice blown through a quill into the eyes of those afflicted with the pin and web, as it is called, or rheumatic distillations in them, cleanses and greatly relieves them. The juice of liquorice is as effectual in all diseases of the breast and lungs, the reins and bladder, as the decoction. The juice dissolved in rose-water, with some gum tragacanth, is a fine medicine for hoarsenes, wheezings, &c.

### L I V E R - W O R T. LICHEN.

**DESCRIPTION.** THE common liver-wort groweth close, and spreadeth much upon the ground, in moist and shadowy places, with numerous sad-green leaves,

or rather, as it were, sticking flat one to another, very unevenly cut in on the edges and crumpled, from among which arise small slender stalks, an inch or two high at most, bearing small flowers at the tops, somewhat resembling stars.

GOVERNMENT AND VIRTUES. It is under the command of Jupiter, and under the sign Cancer. It is a singular good herb for all the diseases of the liver, both to cool and cleanse it, and helpeth inflammations in any part; it is likewise serviceable in the yellow jaundice; being bruised and boiled in small beer, and drunk, it cooleth the heat of the liver and kidneys, and helpeth the running of the reins in men, and the whites in women; it is a singular remedy to stay the spreading of tetter, ringworms, and other fretting and running sores and scabs and is an excellent remedy for such whose livers are corrupted by surfeits, which caufeth their bodies to break out; for it fortifies the liver exceedingly, and makes it impregnable.

#### LOOSE-STRIFE, OR WILLOW-HERB. *LYSIMACHIA.*

DESCRIPTION. THE common yellow loose-strife groweth to the height of four or five feet, with great round stalks a little crested, diversely branched, from the middle of them to the tops, into great and long branches, on all of which, at the joints, there grow long and narrow leaves, but broader below, and usually two at a joint, yet sometimes three or four, somewhat like willow-leaves, smooth on the edges, and of a faint green colour; from the upper joints of the branches, and at the tops of them also, stand many yellow flowers of five leaves a-piece, with divers yellow threads in the middle, which turn into small round heads, containing small cornered seeds. The root creepeth under ground, almost like couch-grass, but greater, and shooteth up every spring, with brownish heads which afterwards grow up into two stalks; it hath no scent nor taste.

PLACE. It groweth in most parts of the kingdom, in moist meadows, and by the sides of water.

TIME. It flowereth from June to August.

GOVERNMENT AND VIRTUES. This herb is good for all manner of bleeding at the mouth or nose, or wounds; all fluxes of the belly, as well as the bloody flux, given either to drink, or administered as a clyster; it stayeth also the abundance of women's courses. It is a singularly-good herb for green wounds, to stay the bleeding, and quickly closes together the lips of the wound, if the herb be bruised, and the juice only applied. It is often used in gargles for sore mouths, as also for the secret parts. The smoke hereof, on its being burnt, driveth away flies and gnats, which are used in the night-time to infest the habitations of people dwelling near marshes, and in the fenny countries.

LOOSE-

**DESCRIPTION.** This growtheth with many woody square stalks, full of joints, about three feet high at least, at every one whereof are two long leaves, shorter, narrower, and of a darker green colour, than the former, and somewhat brownish. The stalks are branched into many long stems of spiked flowers, half a foot long, growing in bundles one above another, out of small husks very like the spiked heads of lavender, each of which flowers has five round pointed leaves of a purple violet colour, or somewhat inclining to rednes, in which husks stand small round heads after the flowers are fallen, wherein is contained small seed ; the root creepeth under ground like unto the yellow, but is greater than it ; and so are the heads of the leaves when they first appear out of the ground, and more brown than the other.

**PLACE.** It growtheth usually by rivers, and ditch-sides in wet grounds, as about the ditches at and near Lanibeth, and in many other parts of the kingdom.

**TIME.** It flowereth in the months of June and July.

**GOVERNMENT AND VIRTUES.** The herb is an herb of the Moon, and under the sign Cancer ; it is an excellent preservative of the sight when well ; nor is there a better cure for sore eyes than the eye-bright taken inwardly, and this used outwardly ; it is cold in quality. This herb is not a whit inferior to the former, it having not only all the virtues which the former hath, but some peculiar virtues of its own, found out by experience ; namely, the distilled water is a present remedy for hurts and blows on the eyes, and for blindnes, if the crystalline humour be not perished or hurt ; and this hath been sufficiently proved true by the experience of a person of judgment, who kept it long to himself as a great secret ; it also cleareth the eyes of dust or any other thing which may have got into them, and preserveth the sight. It is a good remedy for wounds and thrusts, being made into an ointment in the following manner : To every ounce of the water add two drams of May-butter without salt, and of sugar and bee's-wax the same quantity of each, which must boil gently altogether ; when thus brought to a proper consistence, let tents be dipped in the ointment after it is cold, and put into the wounds, and the place covered with a linen cloth doubled, on which the ointment may be thinly spread ; this is an approved medicine. It likewise cleanseth and healeth all foul ulcers and sores whatsoever, by washing them with the water, and laying on them a green leaf or two in the summer, or dry leaves in the winter. This water, when warmed, and used as a gargle, or even drunk sometimes, cures the quinsy, or king's evil in the throat. The said water, applied warm, taketh away all spots, marks, and scabs, in the skin ; and a little of it drunk, quencheth extraordinary thirst.

LOVAGE.

## LOVAGE. LIGUSTICUM.

**DESCRIPTION.** IT hath many long and great stalks, with large winged leaves, divided into many parts like smallage, but much larger and greater, every leaf being cut about the edges, broadest forwards, and smallest at the stalk, of a sad-green colour, smooth and shining; from among which rise up sundry strong hollow green stalks, five or six feet, and sometimes seven or eight feet, high, full of joints, but smaller leaves set on them that grow below; and with them, toward the tops, come forth long branches, bearing at their tops large umbels of yellow flowers, and after them flat brownish seed. The root groweth thick, great, and deep, spreading much, and enduring long, of a brownish colour on the outside, and whitish within. The whole plant, and every individual part of it, smelleth strong and aromatically, and is of a hot, sharp, biting, taste.

**PLACE.** It is usually planted in gardens, where, if it be suffered, it groweth huge and great.

**TIME.** It flowereth in the end of July, and seedeth in August.

**GOVERNMENT AND VIRTUES.** It is an herb of the Sun, under the sign Taurus. If Saturn offend the throat, (as he always doth if he be the occasion of the malady, and in Taurus is the genesis,) this is your cure. It openeth, cutteth, and digesteth, humours, and mightily provoketh women's courses and urine; half a dram at a time of the dried root in powder, taken in wine, doth wonderfully warm a cold stomach, helping digestion, and consuming all raw and superfluous moisture therein; easeth all inward gripings and pains, dissolveth wind, and resisteth poison and infection. To drink the decoction of this herb is a well-known and much-practised remedy for any sort of ague, and greatly helps the pains and torments of the body and bowels occasioned by cold. The seed is effectual to all the purposes aforesaid, except the last, and worketh more powerfully. The distilled water from the herb helpeth the quinsy in the throat, if the mouth and throat be gargled and washed therewith; and relieveth the pleurisy, being drunk three or four times. When dropped into the eyes, it taketh away the redness or dimness of them; it also taketh away spots or freckles in the face. The leaves bruised, and fried with a little hog's-lard, applied hot to any blotch or boil, will quickly break it.

## LOVE-APPLE. SOLANUM.

IT is also called golden apple of love, and in Latin *poma amoris*:

No. 16.

3.N.

DESCRIP-

**DESCRIPTION.** It groweth into a tree of a reasonable height, with large dented leaves, cut in upon the edges, and of a pale green colour. The blossoms are large and white, which falling, the fruit follows.

**PLACE.** The tree is a native of Ethiopia; but it is planted in the gardens or nurseries of many of the curious in this kingdom.

**TIME.** They blossom in April and May, and the fruit is ripe in August and September.

**GOVERNMENT AND VIRTUES.** The apples of love are under Venus; yet are they cold and moist in an extreme degree. They are olygotrophic and cachochymic; yet, in hot countries, they are eaten as sauce, boiled with pepper, salt, and oil. The juice, boiled with axungia to a salve, heals all inflammations and burnings; and the leaves boiled with oil-olive till crisped, then strained, and afterwards boiled with wax, rosin, and a little turpentine, to a salve, are an infallible remedy for old sores and ulcers of the privities, or for wounds and ulcers in other parts of the body, coming of heat, or viscous humours of the blood.

#### LUNG-WORT. PULMONARIA.

**DESCRIPTION.** THIS is a kind of moss that groweth on sundry sorts of trees, especially oak and beech; with broad, greyish, tough, leaves, diversely folded, crumpled, and gashed in on the edges, and sometimes spotted also with many small spots on the upper side: it was never seen to bear any stalk, or flower at any time.

**GOVERNMENT AND VIRTUES.** Jupiter seems to own this herb, which is greatly used by physicians to help the diseases of the lungs, and for coughs, wheezings, and shortness of breath, which it cureth both in man and beast; it is very successfully used in lotions that are taken to stay the moist humours that flow to ulcers, which hinder their healing; as also to wash all other ulcers in the privy parts of men or women. It is an excellent remedy, boiled in beer, for broken-winded horses.

#### LARCH-TREE, AND ITS AGARIC. PINUS.

**DESCRIPTION AND NAMES.** It grows about Italy, and also in Asia. It is called *larix* both in Greek and Latin; and also *agaricum*, and *agaricus*; the agaric is an excrescence, or kind of mushroom, that groweth on this tree, being within white, soft, and spongy, like a mushroom. The agaric is hot in the first degree, and dry in the second; it hath an attenuating cleansing quality, and

purges obstructions of the entrails by stool; it purgeth phlegm, choler, and melancholy, and cleanseth the breast, lungs, liver, and reins; provokes urine, and the terms; kills worms, helps pains of the joints, and causeth a good colour.

It is not good to be taken alone, without corrigents; therefore the syrup of roses, solutive with agaric, is good to be taken: it cures the yellow jaundice, and is exceeding good for agues coming of thick humours, for which they take pills of hiera with agaric; it may be given with oxymel for agues of all sorts, and gripings of the belly: it is good against shortness of breath, the phthysic, and consumption; half a dram thereof in wine is an excellent antidote against poisons.

#### LENTILES. ERVUM.

KINDS AND NAMES. THEY are called *lens* and *lenticula*, in Latin. In some counties of England, where they sow them for meat for their cattle, they call them *tills*.

There are three sorts. 1. *Lens major*, the greater lentil. 2. *Lens minor*, the smaller lentil. 3. *Lens maculata*, the spotted lentil.

DESCRIPTION. 1. The greater lentil groweth about two feet long, with many hard, yet slender and weak, branches, whence, at several places, shoot forth long stalks of small winged leaves, many on each side of a middle rib, which middle rib endeth in a small clasper; between the leaves and the stalks come the flowers, which are small, of a sad reddish colour, inclined to purple, almost like the flowers of vetches; they stand, for the most part, two at the end of a long foot-stalk; after the flowers are gone, there succeed small, short, flat, pods, wherein is flat, round, smooth, seed, of a pale yellow ash-colour; the root is fibrous, and dieth every winter.

2. The smaller lentil differeth from the former only in this, that the stalks, leaves, and seed, are less; the flowers more pale, and the seeds whiter.

3. The third differs not much from the last; but the seed is spotted with black.

GOVERNMENT AND VIRTUES. They are under the dominion of Saturn; of a mean temperature between heat and cold, and dry in the second degree. According to Galen, they are somewhat astringent, and bind the body, especially the outward skin. It is of contrary qualities, for the decoction thereof doth not bind but loosen the body; therefore, those who would have it bind must throw away the first water and use the second, which stops the latke, and strengthens the stomach and inward parts.

LEMON.

## LEMONTREE, OR LEMONS. CITRUS.

**NAMES.** THERE are several sorts of lemons: some great, others small; some having very thick and rugged peels, and some very smooth; some are of a wild juice, others sharp, and some very tart and crabbed; which alterations may be made both by the soil and place where they grow or are planted.

1. The ordinary lemon-tree is called *Citrus limon*.
2. *Citrus acris, cortice temui*; the thin-rined sour lemon, or lime.
3. *Citrus acris, fructu rotunda*; the four round lemon.
4. *Citrus limonia dulcis major*; the greater sweet lemon.
5. *Citrus limonia dulcis minor*; the smaller sweet lemon, or Seville lemon.
6. *Citrus limonia silvestris minima*; the least wild lemon-tree.

**DESCRIPTION.** 1. The ordinary lemon-tree groweth great and high, with great arms and slender branches, with long greenish thorns; the leaves are long like unto bay-leaves, both dented about the edges, and full of holes; the flowers are white and sweet; the fruit long and round, of a pale yellow colour; and the rind rugged and uneven.

2. All the difference between this and the former is this, that the other is bigger. The rind of this second is of a fine pale yellow colour, smoother than the first-mentioned, and thinner; is full of a pleasant sharp juice, with seeds amongst it, as the other also hath.

3. The tree that beareth the round lemons is in all things like the last; only in this, that it hath few or no thorns upon it; and the fruit is like it, having a thin rind, but is somewhat rounder, with a small crown at the head.

4. The greater sweet lemon is greater than any of the former-described lemons; the rind is more smooth and yellow; and the juice more sweet and pleasant.

5. This lemon is of the same size as the thin-rined sour lemon, and so like, that it is hard, by the outside, to know one from the other; but this hath a little deeper-coloured rind, and the juice of a sweet pleasant taste, with a little sharpness.

6. The least wild lemon groweth wild in Syria and Egypt, and beareth very small fruit, no bigger than a pigeon's egg.

**PLACE.** These lemons are brought unto us from Spain, and several of their islands.

**TIME.** They are evergreens, and never without blossoms, green and ripe fruit, throughout the year.

**GOVERNMENT AND VIRTUES.** The lemons are solar, yet of different parts, and contrary effects; they are of good use to resist poison, venom, or infection; an

ounce and a half of the juice of unripe lemons, drunk in wine, cleanseth the kidneys of the stone and gravel; and killeth worms in the body, and expelleth them.

An antidote against the plague, or any malignant or contagious disease, is thus prepared: Take four ounces of the pure juice of lemons, steep therein an angel of gold, or the weight thereof in leaf-gold, the space of twenty-four hours; then take out the gold, or draw the juice clear from it, and give some of it in a draught of wine, with a little of the powder of angelica-root, unto any infected with the plague, and, if there be any hopes of recovery, it will help them. The juice of sweet lemons is neither so cooling nor operative as the other. The distilled water, drawn from the inner pulp or white substance of the lemons, clearéth the skin and face from freckles and spots, provokes urine, and expels the stone, by being drunk; helpeth the running scab, kills lice in the head, worms in the hands or nose, and wheals or pushes in the skin. The juice of lemons is good for seamen, and others at sea, to put into their beverage, to prevent the scurvy, to which people are much subjected in long voyages; it is likewise very properly used to quench thirst in warm climates.

An excellent remedy for scab and itch: Take a lemon, and cut it through the middle, after putting thereon some powder of brimstone, roast it, either against the fire, or under some embers, as you would do a warden-pear, and therewith rub the parts troubled with itch or scabs.

It is also the best, most sovereign, and clear, remedy to destroy those *pediculi inguinales*, vulgarly called crab-lice, the parts afflicted with them being rubbed therewith.

#### LINE, OR LINDEN-TREE. TILIA.

KINDS AND NAMES. OF the line-tree there are accounted two sorts, the male and the female; and of the female also two sorts, the greater and the smaller. It is called in Latin, *tilia*.

DESCRIPTION. 1. *Tilia mas*, the male line, groweth to be a great tree, with large spreading boughs, but not so much as the female, nor so flexible, but harder and more brittle, and of a thicker bark; the leaves are like unto elder leaves, but smaller and longer; and on every one, for the most part, grow small bladders full of worms, that turn into flies, which, when matured, fly away.

This tree seldom beareth either flower or fruit; yet, when it doth bear, it is round flat husks; many growing close together, each hanging on a long foot-stalk by itself, with a notch and cleft at the head or end thereof. The wood hereof is more knotty and yellow than that of the female.

2. *Tilia fæmina major.* The greater female lime-tree groweth to be a larger tree than the former (especially if it happen to be planted in good ground); it is covered with a dark-coloured bark, the next thereunto being very pliable to bend, having some other thin rinds within that; the leaves are fair and broad, greener, smoother, gentler, and rounder, than elm-leaves, and with a longer end; dented about the edges, and of a tolerably good scent; at the end of the branches oftentimes, and at the foot of the leaves, shoot forth long and narrow whitish leaves, along the middle rib whereof springeth out a slender long stalk, with divers white flowers thereon, smelling very sweet; after which follow small berries, wherein is contained black round seed; the wood is whitish, smooth, and light.

3. *Tilia fæmina minor.* The smaller linden-tree is like the last in all things, except that it groweth smaller in body, leaves, and flowers; the leaves are of a darker green colour, and it beareth no fruit after the flowers.

PLACE AND TIME. The greater female kind is planted in many places in this kingdom, in pleasant walks, it making a large sweet shadow, and usually flowereth in May. The others are seldom to be met with in this island.

GOVERNMENT AND VIRTUES. There is no medicinal use made of the male linden. The female is under the dominion of Venus, of a moderate temperature, and somewhat drying and astringent; the decoction of the leaves, got by boiling them in water, is a good lotion to wash the mouth of young children, or any sore mouths that have ulcers, blisters, or cankers, in them. The leaves being pounded or bruised, after boiling, and applied to the legs or feet, when swelled with the falling down of humours, doth help them; the bark is also effectual for the same purpose.

The flowers of the lime-tree and of lily-convalley distilled together are good against the falling sickness; so likewise is the distilled water of the bark; and is also serviceable against those fretting humours which occasion the bloody flux, and griping in the guts. The water, wherein the inner bark hath been steeped till it becomes thick and mucilaginous, and applied with cloths wet therein, helps burnings and scaldings.

#### LUNG - FLOWER. GENTIANA.

THERE are several sorts of these plants; and they are generally called autumn gentians.

DESCRIPTION. The greater autumn gentian riseth up, according to the richness of the ground, higher or lower; sometimes two feet high, at others not above one foot; sometimes many, and others fewer, stalks; of a brownish-green colour,

with many long and narrow dark-green leaves, set by couples upon them, up to the tops, which seldom branch forth, but bear every one a large hollow flower, in most of them of a deep bluish purple colour, but in some a little paler, ending in five points. The roots are numerous, small, and long, growing deep into the ground, and abiding all the winter.

2. *Gentianella autumnalis fimbriato flore*; autumn gentian of Naples. This creeps up like couch-grass, from a long, yellowish, small root, shooting forth a few long and narrow leaves, like those of flax, but shorter; but those that grow up to the middle of the stalk are larger, and smaller again from the middle to the top, two set at every joint all along, and striped from every one of the joints, on both sides, to the top of the stalk, which is green, and about a foot high; at the top cometh a purplish-green husk, which hath four large-pointed leaves that enclose the flower, which is long and writhed before it blows, and of a pale-blue colour; but, when it is blown open, it is of a deeper-blue colour, having four leaves somewhat long, and as it were purfled about the edges, with a little hairiness; there is also a small leaf at the bottom of each flower, with a few yellow threads in the middle, standing about a head, which groweth to be the seed-ves-fel, forked into two parts at the head, being greater there than below, and containeth in it very small black seed when it is ripe.

3. Autumn gentian, with small centaury-leaves, called in Latin *Gentianella autumnalis, centaureæ minoris folio*. This riseth up with sundry stalks scarcely a foot high, parted into many small branches, whereon do stand two leaves together, very like those of the smaller centaury, not so long as either of the former, but a little broader, and of a lighter green colour; at the tops of the stalks and branches grow divers blue flowers, set in small long husks half-way rising above the tops of them; the seed is small, and groweth in long horned vessels; the root is small and fibrous.

4. There is another sort, with small centaury-like flowers, which is more spreading; is small, but hath larger leaves and flowers than centaury; of the same colour as the flowers of centaury, yet having more, and lasteth longer. The root, however, perisheth in the winter.

5. Another smaller gentian, with centaury leaves, is very like the last, but smaller, and the stalks much lower, not being above three inches high, having many small branches, whereon are large blue flowers; the seed and vessels, when they are ripe, are like unto the last; the root is also small; but hath many more fibres than the others.

PLACE. The first is found growing in many parts of Germany, and many other foreign countries; in divers places of this kingdom, viz, at Gravesend; near

Greenhithe; in a chalk-pit not far from Dartford; and at Cobham; all in Kent: it groweth both in wet and dry grounds. The second upon the hills in Naples, as related by Columna. The third in divers places in Kent, as about Southfleet, and Longfield; also in Bedfordshire; and near old Verulam in Hertfordshire. The rest are strangers here.

TIME. These flower not until August or September; and thence have the name of autumn gentian.

GOVERNMENT AND VIRTUES. These lung-flowers, or autumn gentian, are also under the dominion of Mars, as the gentian or fell-wort is; and much of the same temperature in respect to heat and drynes; and may be used both inwardly and outwardly as effectually as gentian; and, where these are in plenty, and the other not easy to be had, will be found an efficacious substitute.

They are powerful against putrefaction, venom, and poison; the Germans account it their treacle, and formerly did make treacle with it, the aristolochia, bay-leaves, and other ingredients, at Jena, from whence it took the name of Jenes-treacle, under which title it was imported into this kingdom; and is an excellent specific for all complaints in the stomach; a preventative against infection from the plague and all other infectious diseases, and expels the malignity thereof; preserves the heart, and strengthens it against faintings and swoonings; which treacle was of bitter taste: but that which is now commonly used by the vulgar people, and generally, by them, called treacle, is very falsely denominated, being nothing else than the gross dregs of sugar left after boiling and refining thereof, and is properly called molasses; which, though no wise helpful in any disease, is yet usually and greedily desired and taken by the common people as an universal medicine.

The roots of these gentians, being made into fine powder, and taken in wine, either by themselves or with other things, as myrrh, rue, pepper, or the like, is an effectual remedy against the bitings or stingings of serpents, or any other venomous creature, and against the bite of a mad dog, being taken three or four days together, and the wound carefully kept open with vinegar and salt water, and regularly cleansed and dressed.

The same roots, being so taken in wine, open all obstructions of the liver, and help such as are liver-grown. It easeth pains in the stomach, and helpeth such as cannot keep or relish their meat, or have lost their appetite. It refresheth such as are fatigued with travelling; being steeped in wine and drunk, it helps such as are lame in their joints owing to cold or bad lodging; is effectual for pains, stiches, and prickings, in the sides; and is also good for those who are bruised by falls, it possessing

possessing the virtue of dissolving congealed blood, and easing the pain occasioned thereby. The root is likewise held to be good against agues, when taken in any other liquor but wine; the distilled water of the herb is equally useful.

### LUPINES. LUPINUS.

**KINDS AND NAMES.** There are several kinds of lupines, as, the great white lupine, called *lupinus sativus albus*; the spotted white lupine, called *lupinus alter albus*; and the smallest blue lupine, called *lupinus minimus cœruleus*.

**DESCRIPTION.** 1. The great white lupine riseth up with a strong, upright, round, woolly, stalk, set confusedly with divers soft woolly leaves upon long foot-stalks, each being divided into several parts, narrow, long, and soft, greenish on the upper side, and woolly underneath; the main stalk is divided into two parts, after the flowers are grown from the uppermost joint, and are like unto the great garden bean, but wholly white, without any spot; after the flowers come long, soft, woolly, stalks, containing in them flat white leaves, somewhat yellowish within, of a very bitter taste. The root is long, hard, and fibrous, and perisheth every winter.

2. The spotted white lupine differeth from the former in the greatness and in the flower, which is spotted with blue on the head of the innermost leaves, and the hollow of the uppermost.

3. The smallest blue lupine is very like the other blue lupine; but smaller, both stalks and leaves; the flowers are blue, and the seed a little spotted.

**PLACE.** They grow naturally wild, but in England only are planted in gardens.

**TIME.** The lupines flower in July and August, and the seed is ripe soon after.

**GOVERNMENT AND VIRTUES.** Lupines are under the dominion of Mars: and have an opening, cleansing, dissolving, and digestive, property; but, if they be steeped in water until they have lost their bitterness, they may be eaten; however, they are very hard to digest, breed gross humours, and pass slowly through the belly, yet do not stop any flux; if they be so steeped, and afterwards dried and taken with vinegar, they provoke appetite, and help the loathing of the stomach to meat. The decoction of lupines taken with honey, opens obstructions of the liver and spleen, provokes urine and the terms, and expelleth the dead child, when taken with myrrh. It also cleareth the body of scabs, morphew, cankers, tetterers, and running ulcers or sores; also cleanseth the face; taketh away the marks or pits which the small-pox leaves behind it; and cleareth the skin of marks, and black-and-blue spots.

An ointment of lupines, to beautify and make the face smooth, is made in the following manner: Take the meal of lupines, the gall of a goat or sheep, juice of lemons, and a little *alumen saccharinum*, and mingle them into the form of a soft ointment.

The meal of lupines, boiled in vinegar, and applied to the parts, taketh away knobs, kernels, or pimples. The shells being burnt, the smoke thereof drives away gnats and flies.

### MADDER. RUBIA.

**DESCRIPTION.** GARDEN-MADDER shoothe forth many very long, weak, four-square, reddish, stalks, trailing on the ground a great way, very rough and hairy, and full of joints, at every one of which come forth divers long and somewhat narrow leaves, standing like a star about the stalks; rough also and hairy towards the tops, whereof come forth many small pale-yellow flowers; after which come small round heads, green at first, and reddish afterwards, but black when they are ripe, wherein is contained the seed. The root is not very great, though about a yard long, spreading divers ways, and is of a clear red colour while it is fresh.

**PLACE.** It is cultivated in gardens or large fields, on account of the profits.

**TIME.** It flowereth toward the end of summer, and the seed is ripe quickly after.

**GOVERNMENT AND VIRTUES.** It is an herb of Mars; hath an opening quality, but afterwards binds and strengthens; is an assured remedy for the yellow jaundice by opening the obstructions of the liver and gall, and cleansing those parts; it openeth also the obstructions of the spleen, and diminislieth the melancholic humour. It is available for the palsey and sciatica; is effectual for inward and outward bruises, and is therefore much used in vulnerary drinks. The root, for all those aforesaid purposes, is to be boiled in wine or water, as the case requireth, and some honey or fugar put thereunto afterwards. The seed hereof, taken with vinegar and honey, helpeth the swelling and hardness of the spleen. The decoction of the leaves and branches is a good fomentation for women to sit over that have not their courses. The leaves and roots, beaten, and applied to any part that is discoloured with freckles, morphew, white scurf, or any such deformity of the skin, cleanse and thoroughly take them away.

The root of this madder, holden in the hand, while fresh, will, when a person makes water, change it to the colour of blood.

## MAIDEN-HAIR. ADIANTUM.

DESCRIPTION. THE common maiden-hair doth, from a number of black hard fibres, send forth a great many blackish shining brittle stalks, hardly a span long; in many not half so long; on each side set very thick with small round dark-green leaves, spotted on the back of them like other ferns.

PLACE. It groweth much upon old stone walls in the western parts of England; in Wales, in Kent, and divers other places. It is to be found, in great abundance, by the sides of springs, wells, and on the rocky, moist, and shadowy, places; and is always green.

## WALL-RUE, OR ORDINARY WHITE MAIDEN-HAIR. ASPLENIUM.

DESCRIPTION. THIS hath very fine pale-green stalks, almost as fine as hairs, set confusedly with divers pale-green leaves on very short footstalks, somewhat similar to the colour of garden-rue, and not much differing in form, but more diversely cut in on the edges, and thicker; smooth on the upper part, and spotted finely underneath.

PLACE. It groweth in many parts of the kingdom; at Dartford, and the bridge at Ashford, both in Kent; at Beaconsfield, in Buckinghamshire; on Framlingham castle, in Suffolk; on the church-walls at Mayfield, in Sussex; in Somersetshire; and divers other parts. It is green in winter as well as summer.

GOVERNMENT AND VIRTUES. Both this and the former are under the dominion of Mercury, and so is that also which follows after; and the virtues of both are so nearly alike, that describing those of the one will equally answer the other.

The decoction of the herb maiden-hair, being drunk, relieveth those that are troubled with a cough, shortness of breath, the yellow jaundice, diseases of the spleen, stoppage of urine, and helpeth exceedingly to break the stone in the kidneys, (in all which cases the wall-rue is also very effectual.) It provoketh women's courses, and stayeth both bleedings and fluxes of the stomach and belly, especially when the herb is dry; but, when green, it openeth the body, videnteth choleric and phlegm from the stomach and liver; it cleanseth the lungs, and by rectifying the blood causeth a good colour to the whole body. The herb, boiled in oil of camomile, dissolveth knots, allayeth swellings, and drieth up moist ulcers. The lye made thereof is singularly good to cleanse the head from scurf, and from dry and running sores; stayeth the falling or shedding of the hair, and causeth it to grow thick, fair, and well-coloured; for which purpose some boil it in wine, putting some

some smallage-seed thereto, and afterwards some oil. The wall-rue is as effectual as maiden-hair in all diseases of the head, preventing baldness, and causing the hair to grow again; and generally for all the aforesaid diseases. The powder of it, taken in drink for forty days together, helpeth ruptures in children.

### GOLDEN MAIDEN-HAIR. *POLYTRICHUM.*

TO the two former this may be added, which, possessing the same virtues, it is therefore needless to repeat them.

**DESCRIPTION.** It hath many small brownish-red hairs, to make up the form of leaves, growing about the ground from the root; and in the middle of them, in summer, rise small stalks of the same colour, set with very fine yellowish-green hairs on them, and bearing a small gold-yellow head, smaller than a wheat-corn, standing in a great husk. The root is very small and thready.

**PLACE.** It groweth on bogs and marshy grounds, and also on dry shadowy places; at Hampstead-heath, and elsewhere.

### MALLROWS AND MARSH-MALLROWS. *ALTHAEA.*

**COMMON** mallows are generally so well-known, that they need no description. The common marsh-mallows have divers soft, hoary, white, stalks, rising to the height of three or four feet, spreading forth many branches, the leaves whereof are soft and hairy, somewhat smaller than the other mallow leaves, but longer pointed, cut (for the most part) into some few divisions, but deep. The flowers are many, but smaller also than the other mallows, and white, or tending to a bluish-colour; after which come such-like round cases and seed as in the other mallows. The roots are many and long, shooting from one head, of the bigness of a thumb or finger, very pliant, tough, and bending, like liquorice, of a whitish-yellow colour on the outside, and more white within, full of a slimy juice, which, being laid in water, will render it as thick as jelly.

**PLACE.** The common mallows grow in every county in the kingdom. The common marsh-mallows grow in most of the salt marshes from Woolwich down to the sea, both on the Kentish and Essex shores, and in many other places.

**TIME.** They are in flower all the summer months, and continue till winter.

**GOVERNMENT AND VIRTUES.** Venus owns them both. The leaves of either of the sorts before specified, and the roots also, boiled in wine or water, or in broth, with parsley or fennel roots, do help to open the body, and are very convenient in hot agues, or other distempers of the body; if the leaves, so boiled, be applied

warm

warm to the belly, it not only voideth hot, choleric, and other offensive, humours, but easeth the pains and torments of the belly coming thereby ; and are therefore used in all clysters conducing to those purposes. The same medicine, when used by nurses, procureth them store of milk. The decoction of the seed of any of the common mallows, made in milk or wine, doth exceedingly help excoriations, the phthisic, pleurify, and other diseases of the chest and lungs that proceed from hot causes, if continued to be taken for any length of time. The leaves and root have the same effects. They help much also in excoriations of the guts and bowels, and hardness of the mother, and in all hot and sharp diseases thereof. The juice drunk in wine, or the decoction of them therein, help women to more speedy and easy delivery. Pliny saith, that whoever takes a spoonful of any of the mallows shall that day be free from all diseases whatsoever, and that it is a good specific for the falling-sickness. The syrup also, and conserve made of the flowers, are very effectual for the same diseases, and to open the body when costive. The leaves, bruised and laid to the eyes with a little honey, taketh away the imposthumation of them. The leaves bruised or rubbed upon any place stung with bees, wasps, or the like, presently taketh away the pains, redness, and swellings, that arise therefrom. Dioscorides saith the decoction of the leaves and roots helpeth all sorts of poison, provided the poison is directly voided by vomiting. A poultice made of the leaves, boiled and bruised, to which is added some bean or barley flour, and oil of roses, is an especial remedy against all hard tumours, inflammations, or imposthumes, swellings of the testicles and other parts, and easeth the pain of them ; also against the hardness of the liver or spleen, on being applied to the affected places. The juice of mallows, boiled in old oil, taketh away all roughness of the skin, as also the scurf, dandriff, or dry scabs, on the head, or other parts, if anointed therewith, or washed with the decoction ; and preserveth the hair from falling off. It is also effectual against scaldings and burnings, St. Antony's fire, and all other hot, red, and painful, swellings in any part of the body. The flowers boiled in oil or water (as every one is disposed,) with a little honey and alum put thereto, is an excellent gargle to wash, cleanse, and heal, any sore mouth or throat, in a short space. If the feet be bathed or washed with the decoction of the leaves, roots, and flowers, it helpeth much the defluxions of rheum from the head. If the head be washed therewith, it preventeth baldness. The green leaves (saith Pliny) beaten with nitre and applied to the part, draw out thorns or prickles in the flesh ; and, in short, there is no wound, external or internal, for which this is not a sovereign remedy.

The marsh-mallows are most effectual in all the diseases before-mentioned. The  
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leaves are likewise used to loosen the belly gently, and in decoctions for clysters to ease all pains of the body, opening the strait passages, and making them slippery, whereby the stone may descend the more easily, and without pain, out of the reins, kidneys, and bladder, and to ease the torturing pains thereof; but the roots are of more special use for those purposes, as well as for coughs, hoarseness, shortness of breath, and wheesings, being boiled in wine or honeyed water, and drunk. The roots and seeds thereof, boiled in wine or water, are with good success used by them that have excoriations in the guts, or the bloody flux, by moderating the violence of sharp fretting humours, easing the pains, and healing the soreness; it is successfully taken by them that are troubled with ruptures, cramps, or convulsions of sinews; and, when boiled in white wine, for imposthumes of the throat, commonly called the king's evil, and of those kernels that rise behind the ears, as well as inflammations or swellings in women's breasts. The dried root, boiled in milk, and drunk, is very good for the chin-cough. Hippocrates used to give the decoction of the root, or the juice thereof, to drink, to those that were wounded and ready to faint through loss of blood; and applied the same, mixed with honey and rosin, to the wounds; as also the roots boiled in wine to those that had received any hurt by bruises, falls, or blows; or had any bone or member out of joint, or any swelling, pain, or ach, in the muscles, sinews, or arteries. The mucilage of the roots, and of linseed and fenugreek put together, is much used in poultices, ointments, and plasters, to mollify and digest all hard swellings and the inflammation of them, and to ease pains in any part of the body. The seed, either green or dry, mixed with vinegar, cleanseth the skin from morphew, and all other discolourings, being bathed therewith in the sun.

#### M A P L E-T R E E. ACER.

**GOVERNMENT AND VIRTUES.** IT is under the dominion of Jupiter. The decoction either of the leaves or bark greatly strengthens the liver; it is exceeding good to open obstructions both of the liver and spleen; and easeth pains of the fides proceeding from thence.

#### W I L D M A R J O R A M. ORIGANUM.

**CALLED** also *organe*, or *origanum*, bastard marjoram, and grove marjoram.

**DESCRIPTION.** Wild or field marjoram hath a root which creepeth much under ground, and continueth a long time, sending up sundry brownish, hard, square, stalks, with small dark-green leaves, very like those of sweet marjoram, but harder

and somewhat broader; at the tops of the stalks stand tufts of flowers, of a deep purplish red colour; the seed is small, and something blacker than that of sweet marjoram.

PLACE. It groweth plentifully on the borders of corn-fields, and in some copies.

TIME. It flowereth toward the latter end of summer.

GOVERNMENT AND VIRTUES. This is under the dominion of Mercury. It strengthens the stomach and head much, there being scarcely a better remedy growing for such as are troubled with a sour humour in their stomach; it restores lost appetite: helps the cough, and consumption of the lungs; it cleanseth the body of choler, expelleth poison, and remedieith the infirmities of the spleen; helps the bitings of venomous beasts, and such as have poisoned themselves by eating hemlock, henbane, or opium; it provoketh urine, and the terms in women; helps the dropsy, scurvy, scabs, itch, and the yellow jaundice; the juice, being dropped into the ears, relieves deafness, pain, and noise in the ears. There is a deadly antipathy between this herb and the adder.

#### SWEET MARJORAM. ORIGANUM.

SWEET marjoram is so well known, being an inhabitant in every garden, that it is needless to write any description either of this, the winter sweet marjoram, or pot-marjoram.

PLACE. They grow commonly in gardens, though there are some sorts to be found growing wild, on the borders of corn-fields and pastures in various parts of the kingdom; yet it would be superfluous to detail them, those produced in gardens being most useful.

TIME. They flower in the end of summer.

GOVERNMENT AND VIRTUES. It is an herb of Mercury, under Aries, and is therefore an excellent remedy for the brain, and other parts of the body and mind under the dominion of the same planet. The common sweet marjoram is warming and comfortable in cold diseases of the head, stomach, sinews, and other parts, taken inwardly or outwardly applied. The decoction thereof, being drunk, helpeth all diseases of the chest which hinder the freeness of breathing, and is also serviceable in obstructions of the liver and spleen. It helpeth cold complaints of the womb, and the windiness thereof; also the loss of speech, by resolution of the tongue. The decoction thereof made with some pellitory of Spain and long pepper, or with a little *acorus* or *origanum*, being drunk, is good for those that are beginning to fall into a dropsy, for those who are troubled with a retention of

water,

water, and against pains and torments of the belly ; it provoketh women's courses, if it is used as a pessary. Being made into powder, and mixed with honey, it taketh away the black marks of blows and bruises, by applying it to the part. It is also good for inflammations of, and water in, the eyes, being mixed with fine flour, and laid upon them. The juice, dropped into the ears, easeth the pains and ringing noise in them. It is of great service when put into those ointments and salves that are made to warm and comfort the outward parts, as the joints and sinews ; for swellings also, and places out of joint. The powder thereof snuffed up into the nose, provoketh sneezing, and thereby purgeth the brain ; when chewed in the mouth, it produceth much phlegm. The oil extracted from this herb is very warm and comfortable to joints and sinews that are stiff and hard, tending to mollify and supple them. Marjoram is likewise much used in all odoriferous waters, powders, &c.

#### MARIGOLDS. CALENDULA.

THESE, being so plentiful in almost every garden, are so well known, that they need no description.

TIME. They flower all the summer long, and sometimes in winter, if it be mild.

GOVERNMENT AND VIRTUES. It is an herb of the Sun, and under Leo. They strengthen the heart exceedingly, are very expulsive, and little less effectual in the small-pox and measles than saffron. The juice of marigold leaves mixed with vinegar, by bathing any hot swelling therewith, instantly giveth ease, and assuageth the pain. The flowers, either green or dried, are much used in possets, broths, and drinks, being comfortable to the heart and spirits, and expelling any malignant or pestilential quality which might annoy them. A plaster made with the dry flowers in powder, hog's-grease, turpentine, and rosin, applied to the breast, strengthens and succours the heart greatly, in fevers, whether epidemical or not.

#### M A S T E R - W O R T. IMPERATORIA.

DESCRIPTION. COMMON master-wort hath divers stalks of winged leaves divided into sundry parts, three for the most part standing together at a small foot-stalk on both sides of the greater ; and three likewise at the end of the stalk, somewhat broad, and cut in on the edges into three or more divisions, all of them dented about the brims, of a dark-green colour, somewhat resembling the leaves of angelica, but that these grow lower to the ground, and on smaller stalks ; among which rise up two or three short stalks, about two feet high, and slender, with leaves at the joints similar to those below, but with smaller and fewer divisions, bearing umbels

umbels of white flowers ; and after them, small thin, flat, blackish, seed, larger than dill-seeds ; the root is somewhat greater, and groweth slanting into the ground, shooting forth sundry heads, which taste sharp, biting the tongue, and is the hottest and sharpest part of the plant ; the seed, next unto it, being somewhat blackish on the outside, and smelling well.

**PLACE.** It is usually grown in gardens in this kingdom.

**TIME.** It flowereth and feedeth about the end of August.

**GOVERNMENT AND VIRTUES.** It is an herb of Mars. The root of masterwort is hotter than pepper, and very available in all cold griefs and diseases both of the stomach and body, operating very powerfully both upwards and downwards. It is also used in a decoction, with wine, against all cold rheums, or distillations upon the lungs and shortness of breath, if taken mornings and evenings. It also provoketh urine ; helps to break the stone, and expel the gravel from the kidneys ; procureth women's courses, and expelleth the dead birth ; is singularly good for strangling of the mother, and other similar feminine diseases. It is effectual against the dropfy, cramps, and the falling sickness. The decoction, in wine, being gargled in the mouth, extracteth much water and phlegm from the brain, purging and easing it of what oppresseth it. It is an excellent remedy against all sorts of cold poison ; it provoketh sweat : but, lest the taste hereof or of the seed (which worketh to the like effect, though not so powerfully) should be too offensive, the best way is to take the water distilled from both the root and herb. The juice thereof, or tents dipped therein, applied either to green wounds or to filthy rotten ulcers, and such as are given by envenomed weapons, doth very soon cleanse and heal them. It is also a very good preventative against the rheumatism and gout when they originate from cold.

### SWEET MAUDLIN. ACHILLEA.

**DESCRIPTION.** COMMON maudlin has somewhat long and narrow leaves, ~~finned~~ about the edges ; the stalks are two feet high, bearing at the tops many yellow flowers, set round together, and all of an equal height, in umbels, with tufts like tanfy ; after which followeth small whitish seed, almost as big as wormseed. This herb is both sweet and bitter.

**PLACE AND TIME.** It groweth in gardens, and flowereth in June and July.

**GOVERNMENT AND VIRTUES.** The virtues of this herb are similar to that of costmary, or alecost ; it is therefore unnecessary to repeat them.

No. 17.

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MEDLAR.

## MEDLAR. MESPILOUS.

**DESCRIPTION.** THIS tree groweth near the bigness of the quince-tree, with tolerably large spreading branches; longer and narrower leafed than either the apple or quince, and not dented about the edges. At the end of the sprigs stand the flowers, formed of five white great broad-pointed leaves, marked in the middle with some white threads; after which cometh the fruit, of a brownish-green colour when ripe, bearing the resemblance of a crown on the top, which was originally the five green leaves; and, being rubbed off or having fallen away, the head of the fruit appears somewhat hollow. The fruit is very harsh before it is mellow, and usually hath five hard kernels within it.

There is another kind hereof, differing in nothing from the former, but that it hath some thorns on it, in several places, which the other hath not; and the fruit is small, and not so pleasant.

**PLACE AND TIME.** They grow in this kingdom, and flower in May generally; they bear ripe fruit in September and October.

**GOVERNMENT AND VIRTUES.** This tree is under Saturn. A better medicine for strengthening the retentive faculties is hardly to be met with; it stayeth the longing of women. A plaster, made of the fruit, before they are rotten, with other necessary ingredients, applied to the reins or the back, stops the miscarriage of women with child. They are very powerful in staying any fluxes of blood or humours in men or women. The leaves have also the same quality. The fruit, when eaten by women with child, stayeth their longings after unusual meat, and is very effectual for those who are apt to miscarry. The decoction of them is good to gargle and wash the mouth, throat, and teeth; when there is any defluxion of blood, to stay it, or of humours which cause pains and swellings. It is a good bath for women to sit over that have their courses flow too abundantly; or for the piles when they bleed too much. A poultice or plaster, made of dried medlars, beaten and mixed with the juice of red roses, a few cloves, some nutmeg, and a little red coral, and applied to the stomach, effectually preventeth the casting or loathing of meat. The dried leaves in powder, strewed on fresh bleeding wounds, restrain the blood and close the wound quickly. The medlar stones, made into powder, and drunk in wine wherein some parsley-roots have been infused, or a little boiled, help to break and expel the stone in the kidneys, and is a perfect cure for the gravel in the most obstinate cases.

## MELILOT, OR KING's CHAFER. TRIFOLIUM.

DESCRIPTION. THIS hath many green stalks two or three feet high, rising from a tough, long, white, root, which dieth not every year; set round about at the joints with small, and somewhat long, sweet-smelling leaves, three together, unevenly dented about the edges. The flowers are yellow, also of a sweet scent, and formed like other trefoil, but small, standing in small spikes, one above another, for an hand's breadth long, or more, which afterwards turn into long crooked pods, wherein is contained flat seed, somewhat brown.

PLACE. It groweth plentifully in many parts of this kingdom; on the borders of Suffolk; in Essex, Huntingdonshire, and many other places; but most usually in corn-fields and corners of meadows.

TIME. It flowereth in June and July, and is ripe quickly after.

GOVERNMENT AND VIRTUES. Melilot, boiled in wine, and applied to the parts, mollifies all hard tumours and inflammations that happen in the eye, or other parts of the body; and it is not unusual, in such cases, to add the yolk of a roasted egg, fine flour, poppy-seed, or endive. It healeth spreading ulcers in the head, being washed with lye made thereof; being applied fresh, or boiled with any of the afore-named articles, it relieves pains in the stomach; it also helpeth pains in the ears, being dropped into them; and, steeped in vinegar and rose-water, it mitigateth the head-ach. The flowers of melilot and camomile are frequently mixed in clysters to expel wind and to ease pains; also in poultices, for the same purposes; and to assuage swellings or tumours in the spleen or other parts; and helpeth inflammations in any part of the body. The juice, dropped into the eyes, is a singular good medicine to take away any film or skin that cloudeth or dimmeth the eye-sight. The head often washed with the distilled water of the herb and flowers, or a lye made therewith, is effectual for those that have suddenly lost their senses; as also to strengthen the memory, comfort the head and brain, and to preserve them from pains and the apoplexy.

## FRENCH MERCURY. CHENOPODIUM.

DESCRIPTION. THIS riseth up with a square green stalk, full of joints, two feet high or thereabouts, with two leaves at every joint, and branches likewise from both sides of the stalk, set with fresh green leaves, somewhat broad and long, about the bigness of the leaves of basil, finely dented about the edges. Towards

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the top of the stalks and branches come forth, at every joint, in the male mercury, two small, round, green, heads, standing together upon a short foot-stalk, which when ripe, are the seed, not bearing any flower. In the female, the stalk is longer, spike-fashion, set round about with small green husks, which are the flowers, made like small bunches of grapes, which give no seed, but remain long upon the stalk without shedding. The root is composed of many small fibres, which perisheth every year on the approach of winter; it riseth again of its own sowing, and, where it is once suffered to sow itself, the ground will never be without it afterwards, even of both sorts, male and female.

French mercury helps conception. Costaeus, in his book of the nature of plants, says that the juice of mercury, hollyhock, and purslain, mixed together, and the hands bathed therein, defendeth them from burning, if they are thrust into boiling lead. This is what show-men and merry-andrews bathe their mouths with, when they pretend to eat fire.

#### D O G 's M E R C U R Y. CHENOPODIUM.

HAVING described that which is called French mercury, we come now to that which is known by the designation of dog's mercury.

**DESCRIPTION.** This is likewise of two kinds, male and female, having many stalks, slenderer and lower than mercury, and without any branches at all upon them. The root is set with two leaves at every joint, somewhat greater than the female, but more pointed and full of veins; somewhat harder in handling; of a darker green colour, and less dented or snipped about the edges. At the joints, with the leaves, come forth longer stalks than the former, with two hairy round seeds upon them, twice as big as those of the former mercury. The taste thereof is harsh, and the smell somewhat strong and virulent. The female has much harder leaves, standing upon longer foot-stalks; and the stalks are also longer. From the joints come forth spikes of flowers similar to those of the French female mercury. The roots of both are numerous, and full of small fibres, which run under ground, and mat themselves very much; not perishing as the former mercury doth, but remaining the whole winter, and shooting forth new branches every year, the old ones falling to the ground.

**PLACE.** The male and female French mercury are found wild in divers parts of the kingdom: particularly at a village called Brookland, in Romney-marsh, in the county of Kent.

The dog's mercury is to be found in various parts of Kent, and elsewhere; but the female is more seldom to be met with than the male.

**TIME.** They flourish in the summer months, and then produce their seed.

**GOVERNMENT AND VIRTUES.** Mercury, it is said, owns this herb; but we are of opinion that it is under the dominion of Venus. The decoction of the leaves of mercury, or the juice thereof, in broth, or drunk with a little sugar put to it, purgeth choleric and watery humours. Hippocrates commendeth it wonderfully for women's diseases; when applied to the secret parts, it easeth the pains of the mother; and, when used as a decoction, helps women's courses, and expels the after-birth; the decoction, mixed with myrrh or pepper, or applying the leaves externally, is effectual against the strangury and diseases of the reins and bladder. It is also useful for sore and watery eyes, and for deafness and pains in the ears, by dropping the juice into them, and bathing them afterwards in white wine. The decoction thereof, made with water and a cock chicken, is a safe medicine against hot fits of the ague. It also cleanseth the lungs and stomach of phlegm, though rather offensive to the stomach. The juice, or distilled water, snuffed up into the nostrils, purgeth the head and eyes of catarrhs and rheums. Two or three ounces of the distilled water, with a little sugar, are sometimes taken, in the morning, fasting, to open and purge the body of gross, viscous, and melancholy, humours. What Dioscorides and Theophrastus relate of this herb is truly wonderful, if not fabulous, viz. that, if women use them, either inwardly or outwardly, for three days together after conception, and their menses be stopped, they shall bring forth male or female children, according to the kind of herb which they use. Mathiolus saith, that the seed, both of the male and female mercury, boiled with wormwood, and drunk, cureth the yellow jaundice in a speedy manner. The leaves, or the juice, rubbed upon warts, taketh them away. The juice, mixed with some vinegar, helpeth all running scabs, tetterers, ring-worms, and the itch. Galen saith, that being applied, in the manner of a poultice, to any swelling or inflammation, it digesteth the swelling, and allayeth the inflammation; and is therefore given in clysters to evacuate offensive humours from the belly. Dog's mercury, though less used, is notwithstanding serviceable in purging off watery and melancholy humours.

### M I N T. MENTHA.

**DESCRIPTION.** OF all kinds of mint, the spear-mint, or hart-mint, is the most useful; the description thereof will therefore be sufficient. Spear-mint hath divers round long stalks, but narrow leaves set thereon; of a dark-green colour. The flowers stand in spiked heads at the tops of branches, being of a pale bluish colour. The smell or scent thereof is somewhat similar to basil; it increaseth by the root, under ground, as all the others do.

PLACE. It is an usual inhabitant of gardens ; and, though it seldom giveth any good feed, yet this defect is recompensed by the plentiful increase of the root, which, being once planted in a garden, is hardly to be eradicated. It flowers in August.

GOVERNMENT AND VIRTUES. It is an herb of Venus. Dioscorides saith, it hath a heating, binding, and drying, quality ; therefore the juice, taken with vinegar, stayeth bleeding ; it is an incentive to venery and bodily lust. Two or three branches thereof, taken with the juice of four pomegranates, stayeth the hiccough, vomiting, and allayeth choler. It dissolveth imposthumes, being applied with barley-meal. It is good to repress the milk in women's breasts ; and for such as have swoln, flagging, or large, breasts. Applied with salt, it helpeth the bite of a mad dog ; with mead, or honeyed water, it easeth the pains of the ears, and taketh away the roughness of the tongue, being rubbed thereupon. If the leaves are boiled or steeped in milk before drinking, it hindereth the curdling thereof on the stomach. In short, it is a very powerful stomachic. The frequent use hereof is very efficacious in stopping women's courses and the whites. Applied to the forehead or temples, it easeth pains of the head ; it is good to wash the heads of young children, being a preventative against all manner of breakings out, sores, or scabs, thereon ; it also healeth chaps in the fundament, and is exceedingly useful against the poison of venomous creatures. The distilled water from mint is available for all the purposes aforesaid, yet more weakly ; but the spirit thereof, when properly and chemically drawn, is much more powerful than the herb itself. Simeon Sethi saith, it helpeth a cold liver ; strengtheneth the belly and stomach ; causeth digestion ; stayeth vomiting and the hiccough ; is good against the gnawing of the heart ; provoketh appetite ; taketh away obstructions of the liver ; and stirreth up bodily lust ; but it must not be taken in too great quantities, as it tends to make the blood thin and wheyish, and turneth it into choler ; therefore choleric people must abstain from it. It is a safe medicine for the bite of a mad dog,\* being bruised with salt, and applied to the wound. The powder of it, being dried, and taken after viands, helpeth digestion, and those that are splenetic. Taken in wine, it helpeth women in sore travail in child-bearing. It is good against the gravel and stone in the kidneys, and the strangury. Being smelled unto, it is comfortable for the head and memory. The decoction thereof, when used as a gargle, cureth the mouth and gums, when sore, and helpeth a stinking breath ; when mixed with rue and coriander, also used

\* For the bite of a mad dog, the author's Solar Tincture combines all the virtues of this and other such herbs, and is an infallible remedy, whether the bite is received by man or beast. Let the part bitten be washed clean out ; after which, pour the Tincture in and round the affected part, and wherever the slaver is supposed to have fallen. Bind on some lint dipped three or four times, and let a few drops be taken frequently in a wine-glass of water.

as a gargle, it causeth the palate of the mouth to return to its place, when down. Mint, saith Pliny, exhilarates the mind, and is therefore proper for the studious. When put into any vessel containing milk, it hindereth the curdling thereof, and no butter can be got therefrom.

The virtues of the wild or horse-mint, which grows in ditches, and by the sides of rivers (the description of which is unnecessary, being so well known), are especially to dissolve wind in the stomach, to help the cholic, and those that are short-winded, and are an effectual remedy against venereal dreams and pollutions in the night, being outwardly applied to the testicles. The juice dropped into the ears easeth the pains thereof, and destroyeth the worms that breed therein. They are good against the venomous biting of serpents. The juice, laid on warm, helpeth the king's-evil, or kernels in the throat. The decoction, or distilled water, helpeth in a stinking breath proceeding from the corruption of the teeth; and snuffed up into the nose, purgeth the head. Pliny saith, that eating of the leaves, and applying some of them to the face, have been found, by experience, to cure the leprosy, and, when used with vinegar, to help the scurf, or dandriff of the head.

They are extremely bad for wounded people; it being asserted, that whoever eats mint, when wounded, will never be cured.

#### M I S L E T O E. VISCUM.

**DESCRIPTION.** THIS riseth up from the branch or arm of the tree whereon it groweth, with a woody stem, parting itself into sundry branches, and they are again divided into many other smaller twigs, interlacing themselves one within another, very much covered with a greyish-green bark, having two leaves set at every joint, and at the end likewise, which are somewhat long and narrow, small at the bottom, but broader towards the end. At the knots or joints of the boughs and branches, grow small yellowish flowers, which turn into small, round, white, transparent, berries, three or four together, full of glutinous moisture, with a blackish seed in each of them, which was never yet known to produce any thing, though planted in gardens, and other places, for the purpose of trying it.

**PLACE.** It groweth very rarely on oak-trees in this kingdom, but upon sundry others, as well timber as fruit-trees; and is to be met with in woods, groves, &c.

**TIME.** It flowereth in the spring-time, but the berries are not ripe until October; and, remaining on the branches, serve the birds for food in severe weather.

**GOVERNMENT AND VIRTUES.** That it is under the dominion of the Sun is without a doubt; that which grows upon the oak participates something of the nature of Jupiter, because an oak is one of his trees; as also that which grows upon pear-trees and apple-trees participates something of that nature, because he rules

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the trees it grows upon, having no root of its own ; but why that should have more virtue that grows upon the oak is not so easily determinable, unless because it is rarest and hardest to be come at. Clusius asserts, that that which grows upon pear-trees is equally efficacious with the other sorts, provided it doth not touch the ground after it is gathered ; and also saith, that, being hung about the neck, it remedies witchcraft. Both the leaves and berries of mistletoe are of a hot and dry nature, and of subtle parts. Bird-lime, made thereof, doth mollify hard knots, tumours, and imposthumes ; ripening and discussing them ; draweth forth thick as well as thin humours from the remote parts of the body, digesting and separating them ; and, being mixed with equal parts of rosin and wax, mollifies the hardness of the spleen, and healeth old ulcers and sores ; being mixed with sandarac and orpiment, with quick-lime and wine-lees added thereto, it draws off foul nails from the flesh. Mathiolus saith, that the mistletoe of the oak (being the best), made into powder, and given in drink to those who have the falling-sickness, doth assuredly heal them ; provided it be taken forty days together. Some hold it so highly in estimation, that it is termed *lignum sandæ crucis*, or wood of the holy cross, believing it to help the falling-sickness, apoplexy, and palsey, very speedily, not only when taken inwardly, but applied externally, by hanging it about the neck. Tragus saith, that by bruising the green wood of any mistletoe, and dropping the juice so drawn therefrom into the ears of those who are troubled with imposthumes, it healeth the same in a few days.

The powder of it also cures a pleurisy, and forces the courses. Some think the mistletoe that grows on the hazel-tree is better for the falling-sickness, and other diseases of the head, than that which grows on the oak. Henricus ab Steers thinks it does not grow on hazel-trees till they are about an hundred years old. A young lady, having been long troubled with the falling-sickness, for which she had taken every thing prescribed for her by the most famous doctors, without effect, but growing rather worse, having eight or ten dreadful fits in a day, was cured only by the powder of true mistletoe, given, as much as would lie on a sixpence, early in the morning, in black cherry-water, or in beer, for some days near the full moon.

#### MONKEY-WORT, OR HERB-TWOPENCE. LYSIMACHIA.

**DESCRIPTION.** THE common money-wort sendeth forth, from a small thready root, divers long, weak, and slender, branches, lying and running upon the ground, two or three feet long or more, set with leaves two at a joint, one against another at equal distances, which are almost round, but jointed at the ends, smooth, and of a good green colour. At the joints, with the leaves from the middle forward, come forth

forth at every joint sometimes one yellow flower, and sometimes two, standing each on a small footstalk, formed of five leaves, narrow and pointed at the ends, with some yellow threads in the middle; which being past, there come in their places small round heads of seed.

PLACE. It groweth plentifully in almost every part of the kingdom, commonly in moist grounds, by the sides of hedges, and in the middle of grassy fields.

TIME. They flower in June and July, and their seed is ripe quickly after.

GOVERNMENT AND VIRTUES. Venus owns it. Money-wort is singularly good to stay all fluxes in man or woman, whether they be lasks, bloody fluxes, the flowing of women's courses, bleeding inwardly or outwardly, and the weakness of the stomach that is given to casting. It is also very good for all ulcers or excoriations of the lungs, or other inward parts. It is exceeding good for all wounds, whether fresh or green, or old ulcers of a spreading nature, and healeth them speedily; for all which purposes, the juice of the herb; the powder drunk in water wherein hot steel has been often quenched; the decoction of the green herb in wine or water drunk; the seed, juice, or decoction, used to wash or bathe the outward places, or to have tents dipped therein and applied to the wounds; are effectual.

#### M O O N - W O R T. OSMUNDA.

DESCRIPTION. IT riseth up, usually, but with one dark-green, thick, and flat, leaf, standing upon a short footstalk, not above two fingers breadth; but, when it flowers, bears a small slender stalk, about four or five inches high, having but one leaf set in the middle thereof, which is much divided on both sides, into sometimes five or seven parts on a side, and sometimes more, each of which parts is small next the middle rib, but broad forwards, and round-pointed, resembling a half-moon, from whence it takes its name, the uppermost parts or divisions being less than the lowest. The stalk riseth above this leaf two or three inches, bearing many branches of small long tongues, every one like the spiky head of adder's-tongue, of a brownish colour, which, whether they may be called the flowers or seed, is not so well certified; but, after continuing a while, resolve into a mealy dust. The root is small and fibrous. This hath sometimes divers such-like leaves as are before described, with so many branches or tops rising from one stalk, each divided from the other.

PLACE. It groweth on hills and heaths, particularly where there is plenty of grafs.

No. 17.

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TIME.

TIME. It is to be found only in April and May; but in June, if hot weather cometh, it generally withers and dies.

GOVERNMENT AND VIRTUES. The Moon owns this herb. Moon-wort is cold and drying, in a greater degree even than adder's-tongue, and is therefore serviceable in all wounds, both inward and outward. The leaves boiled in red wine, and drunk, stay the immoderate flux of women's courses, and the whites. It also stayeth bleeding, vomiting, and other fluxes; helpeth all blows and bruises, and consolidates fractures and dislocations. It is good for ruptures; but chiefly used by most, with other herbs, to make oils, or other balsams, to heal fresh or green wounds, either inward or outward, for which it is exceeding good, as is before observed.

Alchemists say, that this herb is peculiarly useful to them in making silver. It is reported, that whatever horse casually treads upon this herb will lose his shoes; it is also said to have the virtue of unlocking their fetlocks and causing them to fall off; but whether these reports be fabulous or true, it is well known to the country people by the name of *unshoe-horse*. Galen saith, that, if it be given to such as are enraged by the biting of a mad-dog, it doth perfectly cure them.

#### M O S S. LICHEN.

IT would be needless to trouble the reader with a description of every kind of moss; that of the ground-moss and tree-moss, which are both well-known, being sufficient for our purpose.

PLACE. The ground-moss grows in moist woods, at the bottom of hills, in boggy grounds, shadowy ditches, and other such-like places, in all parts of the kingdom. The other growtheth only upon trees.

GOVERNMENT AND VIRTUES. All sorts of moss are under the dominion of Saturn. The ground-moss, being boiled in wine and drunk, is held to be very efficacious in breaking the stone, and to expel and drive it forth by urine. The herb, bruised and boiled in water, and applied, easeth all inflammations and pains proceeding from hot causes; and is therefore used to relieve pain arising from the gout.

The different kinds of tree-moss are cooling and binding, and partake of a digesting and mollifying quality withal, as Galen saith. But each moss doth partake of the nature of the tree from whence it is taken; therefore that of the oak is more binding, and is of good effect to stay fluxes in men or women; as also vomitings or bleedings, the powder thereof being taken in wine. The decoction thereof in wine

is very good for women to be bathed with, or to sit over, that are troubled with the overflowings of their courses. The same being drunk, stayeth the stomach that is troubled with casting, or the hiccough; and Avicenna saith, it comforteth the heart. The powder thereof, taken in drink for some time together, is thought available for the dropsy. The oil of roses, which has had some fresh moss steeped therein for a time, and afterwards boiled and applied to the temples and forehead, doth wonderfully ease the head-ach arising from a hot cause; as also the distillation of hot rheum or humours from the eyes, or other parts. The ancients used it much in their ointments and other medicines, against lassitude, and to strengthen and comfort the sinews; it may, consequently, be applied by the moderns with equal success.

### M O T H E R - W O R T . L E O N U R U S .

**D E S C R I P T I O N .** THIS hath a hard, square, brownish, rough, strong, stalk, rising three or four feet high at least, spreading into many branches, whereon grow leaves on each side, with long footstalks, two at every joint, which are somewhat broad and long, as it were rough or crumpled, with many great veins thereon, of a fad-green colour, deeply dented about the edges, and almost divided. From the middle of the branches, up to the tops of them, (which are very long and small,) grow the flowers round about them, at distances, in sharp-pointed, rough, hard, husks, of a more red or purple colour than balm or hoarhound, but in the same manner or form as hoarhound; after which come small, round, blackish, seeds, in great plenty. The root sendeth forth a number of long strings and small fibres, taking strong hold in the ground, of a dark yellowish or brownish colour, and remaineth as the hoarhound doth; the smell of this being not much different from it.

**P L A C E .** It is only produced in gardens in this kingdom.

**G O V E R N M E N T A N D V I R T U E S .** Venus owns this herb, and it is under Leo. There is no better herb to drive melancholy vapours from the heart, to strengthen it, and make the mind cheerful, blithe, and merry. It may be kept in a syrup, or conserve; therefore the Latins call it *cordiaca*. The powder therefore, to the quantity of a spoonful, drunk in cold wine, is a wonderful help to women in sore travail, as also for suffocation or risings of the mother; and from these effects it most likely got the name of mother-wort. It also provoketh urine, and women's courses; cleanseth the chest of cold phlegm oppressing it, and killeth worms in the belly. It is of good use to warm and dry up the cold humours, to digest and disperse them that are settled in the veins, joints, and sinews, of the body, and to help cramps and convulsions.

MOUSE -

## MOUSE-EAR. HIERACIUM.

**DESCRIPTION.** MOUSE-EAR is a low herb, creeping upon the ground by small strings like the strawberry-plant, from which it shooteth forth small roots, whereat grow upon the ground, many small and somewhat short leaves, set in a round form together, hollowish in the middle, where they are broadest; of an hoary colour all over, and very hairy, which, being broken, produce white milk. From among these leaves spring up two or three small hoary stalks, about a span high, with a few smaller leaves thereon; at the tops whereof standeth usually but one flower, consisting of many paler-yellow leaves, broad at the points, and a little dented in, set in three or four rows, the largest outermost, very like a dandelion-flower, and a little reddish underneath about the edges, especially if it grow in dry ground; which, after they have stood long in flower, turn into down, which, with the seed, is blown away by the wind.

**PLACE.** It groweth on the banks of ditches, and in sandy ground.

**TIME.** It flowereth in June and July, and remaineth green all the winter.

**GOVERNMENT AND VIRTUES.** The Moon owns this herb also. The juice thereof, taken in wine, or the decoction thereof drunk, doth help the jaundice, although of long continuance; it is a special remedy against the stone, and griping pains of the bowels. The decoction thereof, with succory and centaury, is held very effectual to help the dropsy, and them that are inclining thereunto, as well as diseases of the spleen. It stayeth the fluxes of the blood, whether at the mouth or nose, and inward bleedings also; it is very efficacious for wounds both inward and outward; it helpeth the bloody flux and the abundance of women's courses.\* There is a syrup made of the juice thereof, and sugar, by the apothecaries of Italy and other places, which is accounted very serviceable to those that are troubled with the cough or phthisic. The same is also singularly good for ruptures or burstings. The green herb, bruised, and directly applied to any fresh cut or wound, doth quickly heal it; and the juice, decoction, or powder, of the dried herb, is very good to stay the malignity of spreading and fretting cankers and ulcers. The distilled water of the plant is available in all the diseases aforesaid, and to wash outward wounds and sores, and by applying tents or cloths wet therein.

\* To stay the abundance of women's courses, and to keep them in due proportion and regular, no medicine in the whole Materia Medica was ever so efficacious as the author's Lunar Tincture; the inherent virtues of which contain the salubrious qualities of this and all other lunar herbs congenial to the female sex.

MUGWORT.

## M U G W O R T. ARTEMISIA.

**DESCRIPTION.** COMMON mugwort hath divers leaves lying upon the ground, very much divided, or cut deeply in about the brims, somewhat like wormwood, but much larger; of a dark green colour on the upper side, and very hoary white underneath. The stalk rises to the height of four or five feet, having on it similar leaves to those below, but somewhat smaller, branching forth very much towards the top, whereon are set very small pale yellowish flowers like buttons, which fall away; and after them come small seed, inclosed in round heads. The root is long and hard, with many small fibres growing from it, whereby it taketh strong hold in the ground; but both stalk and leaf die every year, and the root shooteth forth anew in the spring. The whole plant is of a tolerably good scent, and is more readily propagated by the slips than by the seed.

**PLACE.** It groweth plentifully in many parts of this kingdom, by the roadside; also, by small water-courses; and in divers other places.

**TIME.** It flowereth and seedeth in the end of the summer.

**GOVERNMENT AND VIRTUES.** This is an herb of Venus; therefore maintaineth the parts of the body she rules, and remedies the diseases of the parts that are under her signs, Taurus and Libra. Mugwort is used with good success, among other herbs, in a hot decoction, for women to sit over, to provoke the courses, help delivery, and expel the after-birth; also, for the obstructions and inflammations of the mother. It breaketh the stone, and causeth one to make water when it is stopped. The juice thereof, made up with myrrh, and formed into a pef-fary, worketh the same effects; the root, being made into an ointment with hogs-lard, taketh away wens and hard knots and kernels that grow about the neck and throat, and easeth pains about the neck more effectually, if some field-daisies be put with it. The herb itself, being fresh, or juice thereof, taken, is a special remedy for an over-dose of opium. Three drams of the powder of the dried leaves, taken in wine, is a speedy, and the most certain, cure for the sciatica. A decoction thereof, made with camomile and agrimony, taketh away pains of the finews and the cramp, if the place is bathed therewith while warm.

The leaves and flowers, and the tops of the young shoots, in this plant, are all full of virtue; they are aromatic to the taste, with a little sharpness; and are a most safe and excellent medicine in female disorders arising from obstruction.

The herb has been famous for this from the earliest time; and Providence has placed it every where about our doors; so that reason and authority, as well as the

notice of our senses, point it out for use ; but chemistry has banished natural medicine. Dioscorides bestows high praises on the herb ; and directs the flowery tops to be used, just before they open into bloom ; he determines the dose to be three drams ; and the manner of taking it as tea. It is happy that the ancients, who saw the great effect of these medicines, have been so accurate in the dose and manner of giving them ; wherever they have, we find them always right, and may depend on them as our best guides ; where they have not been so particular, no guess, or bold opinion, is to be indulged ; but all is to be learnt from careful trial. To be assured of their medicines, is the first care ; and, that being ascertained, we shall be certain to find the accounts they give us of their virtues true, if we will wait with patience till we find the dose, beginning from a little. The many who apply, wearied with the expence, and tired with the vain hope of relief from the common practice, give abundant opportunities of finding this safely and exactly ; and, if this publication conveys clearly to mankind the way to reap the advantages of ancient Galenical medicines, the attention to the object will have been well bestowed.

There is no better medicine for young women, in whom the efforts of nature are too weak, than this : the flowers and buds should be stripped off from the tops of the stalks ; three drams of these, clipped small, should be put into a basin, and half a pint of boiling water poured upon them ; and when just cool it is to be drunk with a little sugar and cream : this is to be taken twice a-day during the time of nature's effort, and she will rarely want any farther help ; but, if its effect be not altogether sufficient, such a tea of it should be drunk afterwards every day. Nothing is so destructive to the constitution as the use of too-powerful medicines on this occasion ; this is sufficient, and can do no harm. But it is not to this time of life it is limited, it may be taken at any period ; and there is a peculiar way of using it to great advantage. A lady of thirty-eight, unmarried, and healthy, after riding many mornings on horseback, (a new exercise to her, and therefore over-pleasing,) found herself disappointed at the period of her expectation ; with feverish heat, pain, swelling, and, I believe, inflammation. She had been blooded in the foot ; had taken penny-royal water ; and was entering upon something of more power, when, being informed by another lady of the virtues of this herb, and that the excellent Dioscorides, a better physician than Freind or Mead, advised the fitting over the steam of a decoction of it on certain occasions ; and that, in this particular case, that way seemed in every sense most proper ; — a pound of mugwort was boiled in two gallons of water ; the whole was put together into a pan ; and, when the vapour was not too hot to be borne, the lady sat over it. It was done at night ; and, before morning, all was well and happy.

## MULBERRY-TREE. MORUS.

THIS is so well known, where it groweth, that it needeth no description.

TIME. It beareth fruit in the months of July and August.

GOVERNMENT AND VIRTUES. Mercury rules the tree, therefore are its effects variable as his are. The mulberry partakes of different and opposite qualities; the ripe berries, by reason of their sweetnes and slippery moisture, opening the body, and the unripe binding it, especially when they are dried; and then they are good to stay fluxes, lasks, and the abundance of women's courses. The bark of the root killeth the broad worms in the body. The juice, or the syrup made of the juice, of the berries, helpeth all inflammations or sores in the mouth or throat; and the palate of the mouth when it is fallen down. The juice of the leaves is a remedy against the biting of serpents, and for those that have taken aconite; the leaves, beaten with vinegar, are good to lay on any place that is burnt with fire. A decoction made of the bark and leaves, is good to wash the mouth and teeth when they ach. If the root be a little slit or cut, and a small hole made in the ground next thereunto, in the harvest-time, it will give out a certain juice, which, being hardened the next day, is of good use to help the tooth-ach, to dissolve knots, and purge the belly. The leaves of mulberries are said to stay bleeding at the mouth or nose, the bleeding piles, or of any wound, being bound unto the places. A branch of the tree, taken when the moon is at the full, and bound to the wrist of a woman whose courses overflow, stays them in a short space.

## MULLEIN. VERBASCUM.

DESCRIPTION. COMMON white mullein hath many fair, large, woolly, white, leaves, lying next the ground, somewhat longer than broad, pointed at the ends, and dented as it were about the edges; the stalk riseth up to be four or five feet high, covered over with such-like leaves, but smaller, so that no stalks can be seen for the quantity of leaves thereon, up to the flowers, which come forth on all fides of the stalk, generally without any branches, and are many set together in a long spike, in some of a gold-yellow colour, in others more pale, consisting of five round-pointed leaves, which afterwards have little round heads, wherein a small brownish seed is contained. The root is long, white, and woody; perishing after it hath borne seed.

PLACE. It groweth by road-sides and lanes in many parts of the kingdom.

TIME. It flowereth in July, or thereabouts.

GOVERNMENT AND VIRTUES. It is under the dominion of Saturn. A small quantity of the root, given in wine, is commended by Dioscorides against lasks and fluxes. The decoction thereof, being drunk, helpeth ruptures, cramps, and convulsions, and those that are troubled with an old cough ; and, when used as a gargle, easeth the tooth-ach. An oil, made by frequently infusing the flowers, has a very good effect on the piles. The decoction of the root, in red wine, or in water (if attended with an ague) wherein red-hot steel hath been often quenched, stayeth the bloody flux ; and also openeth obstructions of the bladder and reins, when there is a stoppage of urine. A decoction of the leaves thereof, and of sage, marjoram, and camomile-flowers, and the sinews being bathed therewith that are benumbed with cold, or cramps, doth much ease and comfort them. Three ounces of the distilled water of the flowers, drunk morning and evening, for some days together, are said to be an excellent remedy for the gout. The juice of the leaves and flowers being laid upon rough warts, as also the powder of the dried roots, when rubbed on, doth take them away ; but have no effect upon smooth warts. The powder of the dried flowers is an especial remedy for those that are troubled with the cholic or belly-ach. The decoction of the root, and likewise of the leaves, is of great effect in dissolving tumours, swellings, or inflammations, of the throat. The seed and leaves boiled in wine, and applied to the place, speedily draweth forth thorns and splinters from the flesh, easing the pain, and healing the wound at the same time. The leaves, bruised and wrapped in double papers, and covered with hot ashes and embers, in which they must be baked for some time, and then taken and laid on any blotch or bile, dissolve and heal it.

#### M U S T A R D. SINAPIS.

DESCRIPTION. OUR common mustard hath large and broad rough leaves, very much jagged with uneven and disorderly gashes, somewhat like turnip-leaves, but smaller and rougher ; the stalk riseth to be upwards of a foot high, and sometimes two feet high ; being round, rough, and branched at the top, bearing similar leaves thereon to those below, but smaller, and less divided, and divers yellow flowers one above another at the tops, after which come small rough pods, with small lank flat ends, wherein is contained round yellowish seed, sharp, hot, and biting to the tongue. The roots are small, long, and woody, when it beareth stalk, and perisheth every year.

PLACE. This groweth in gardens only, and other manured grounds.

TIME. It is an annual plant, flowering in July, and the seed is ripe in August.

GOVERNMENT

GOVERNMENT AND VIRTUES. It is an excellent sauce for those whose blood wants clarifying, and for weak stomachs, being an herb of Mars; it is hurtful to choleric people, but highly serviceable to those who are aged, or troubled with cold diseases. Aries claims some share of dominion over this plant; it therefore strengthens the heart, and resisteth poison; let such whose stomachs are so weak that they cannot digest their viuals, or have no appetite thereto, take of mustard-seed a dram, cinnamon as much, and, after beating them to powder, add half as much powder of mastic, and, with gum arabic dissolved in rose-water, make it up into troches, of which the quantity of half a dram may be taken an hour or two before meals, and the good effects thereof will soon be apparent, more particularly to the aged of either sex. Mustard-seed hath the virtue of heating, discussing, rarefying, drawing out splinters of bones, and other things, out of the flesh; provokes the menses; is good for the falling-sickness, lethargy, drowsiness, and forgetfulness, by using it both inwardly and outwardly, rubbing the nostrils, forehead, and temples, to warm and quicken the spirits, as, from its fierce sharpnes, it purgeth the brain by sneezing, and draweth down rheums, and other viscous humours, which, by their distillation upon the lungs and chest, cause coughing; when taken inwardly, it operates more forcibly if mixed with honey. The decoction of the seed made in wine, provoketh urine, resists the force of poison, the malignity of mushrooms, and the venom of scorpions, or other poisonous animals, if it be taken in time. If administered before cold fits of the ague come on, it altereth, lessenneth, and cureth, them. The seed, taken either by itself or with other things, either in an electuary or drink, is a great incentive to venery, and helpeth the spleen, pains in the side, and gnawing in the bowels. If used as a gargle, it draweth up the palate of the mouth, when fallen down. It also dissolveth swellings about the throat, if it be applied externally. Being chewed in the mouth, it oftentimes helpeth the tooth-ach. The outward application thereof upon the pained place, in eases of the sciatica, discusseth the humours, and easeth the pains: as also of the gout, and other joint-achs. It is frequently used to ease pains of the sides, loins, shoulders, or other parts of the body, by applying thereof as a blister, and cureth the disease by drawing it to the outward part of the body; it is also used to help the falling of the hair. The seed, bruised, and mixed with honey or wax, taketh away the black and blue marks occasioned by falls or other bruises; the roughness or scabbiness of the skin; as also the leprosy and lousy evil; it helpeth also the crick in the neck. The distilled water of the herb, when it is in flower, is much used to drink inwardly for any of the diseases aforesaid, and to wash the mouth when the palate is down; and as a gargle for diseases

diseases of the throat; also outwardly for scabs, itch, or other such infirmities; and cleanseth the face from morphew, spots, freckles, and other deformities.

People who are fond of music, and who would wish to improve their voices, have only to mix some of the powder of mustard-seed with honey into balls, and, by swallowing one or two every morning fasting, in a short time they will find their voices to be clear. Mustard-seed and onions, mixed together, provoke weeping.

### H E D G E - M U S T A R D. ERYSIMUM.

**DESCRIPTION.** THIS growtheth up usually but with one blackish-green stalk, tough, easy to bend, but not break, branched into divers parts, and sometimes with divers stalks set full of branches, whereon grow long, rough, or hard, rugged leaves, very much torn or cut on the edges into many parts, some larger and some smaller, of a dirty green colour; the flowers are small and yellow, growing at the tops of the branches in long spikes, flowering by degrees; the stalks have small round pods at the bottom, growing upright, and close to the stalk, whilst the flowers yet shew themselves; in which are contained small yellow seed, sharp and strong, as the herb is also. The root groweth down slender and woody, yet abiding, and springing again every year.

**PLACE.** This growtheth generally by the roads and hedge-sides; but sometimes in the open fields.

**TIME.** It flowereth usually about July.

**GOVERNMENT AND VIRTUES.** Mars owns this herb also. It is singularly good in all the diseases of the chest and lungs, hoarseness of voice; and, by the use of the decoction thereof, some have been recovered who had utterly lost their voices, and nearly their spirits also. The juice of this herb, made into a syrup with honey or sugar, is no less effectual for the same purposes, and for coughs, wheezing, and shortness of breath. It is also serviceable to those who have the jaundice, the pleurisy, pains in the back and loins, and for torments in the belly, or the cholic; it is also used in clysters. The seed is held to be a special remedy against poison and venom, is singularly good for the sciatica, the gout, and all joint-achs, sores and cankers in the mouth, throat, or behind the ears; it is also equally serviceable in reducing the hardness and swelling of the testicles, and of women's breasts.

### M A S T I C - T R E E. PISTACIA.

**NAMES.** IT is called in Latin *lentiscus*; and the gum or rosin, *resina lentisca*, *mastiche*, and *mastic*; in English, mastic.

**DESCRIPTION.**

**DESCRIPTION.** The mastic groweth like a tree when suffered to grow up; and often it riseth but as a shrub. The body and branches are of a reddish colour; tough and gentle, having their ends bending somewhat downwards, whereon do grow winged dark-green leaves consisting of four couple, standing one against another, of the bigness of the large myrtle-leaf, with a reddish circle about their edges, and somewhat reddish veins on the under-side, smelling sweet, and always continuing green; the flowers grow in clusters at the joints, with the leaves, being small, and of a pale purple-green colour; after them come small blackish berries, of the size of a pepper-corn, with a hard black shell under the outer skin, and a white kernel within; it beareth also certain horns, with a clear liquor in them that turneth into small flies. It yieldeth also a clear white gum, in small drops, when the stocks are cut in fundry places; which is carefully gathered and preserved.

**PLACE.** The lentisk-tree groweth in Provence, in France; and also in divers parts of Italy; in Candia; and many other places in Greece; but yieldeth little gum there, especially in the Isle of Scio.

**TIME.** It flowereth in April, and the berries are ripe in September; it is pruned and manured with as great care by the cultivators as others do their vines; the profit arising from the gum being much greater.

**GOVERNMENT AND VIRTUES.** The lentisk-tree is under the influence of Jupiter. It is of moderately hot temperature; but the root, branches, bark, leaves, fruit, and gum, are all of a binding quality, stopping all fluxes and spitting of blood; strengthens a weak stomach, and helps the falling down of the womb and fundament. The decoction healeth up hollow sores, knitteth broken bones, fasteneth loose teeth, and stayeth the spreading of sores, they being fomented therewith. The oil which is pressed out of the berries, helpeth the itch, leprosy, and scab, both in man and beast; gum mastic hath the like virtue of staying fluxes, taken any way in powder; or, if three or four grains of it be swallowed whole at night when going to bed, it not only easeth the pains of the stomach, but hindereth its being affected afterwards; the powder of mastic, with amber and turpentine, is good against the running of the reins, and to check the fluor albus and menses in women. The powder of mastic is also materially useful in stopping thin rheums from falling upon the lungs, which occasion a continual cough and spitting of blood.

#### M E A L Y T R E E. VIBURNUM.

**NAMES.** It is called also the *way-faring tree*; and by Mr. Parkinson, from the pliability of the twigs and branches, the *pliant mealy tree*.

**DESCRIPTION.**

**DESCRIPTION.** This tree hath (from a small body, rising to the height of a hedge-tree, or bush, covered with a dark-greyish bark) sundry small short but very tough and pliant branches, of a finger's thicknes, whose bark is smooth and whitish, whereon grow broad leaves, like elm-leaves, but long and hoary, rough, thick and white like meal, and a little hairy, set by couples, and finely dented about the edges; at the ends of the branches stand large tufts of white flowers, which turn into large bunches of round and flat seed, like that of the lentil, but larger; green when they are first formed, and for a considerable time afterwards, but black when they are ripe.

The branches thereof are so tough and strong, that they serve for bands to tie bundles, or any other thing; or to make fast gates leading into fields, for which purposes they are better adapted than withy, or any thing of that nature.

**PLACE.** It groweth as a hedge-bush, and is often cut and plashed by country people to spread on the hedges; is very frequently found in Kent, and in many other parts of this kingdom.

**TIME.** It flowereth about the end of May, and the fruit is ripe in September.

**GOVERNMENT AND VIRTUES.** It is a plant of Saturn. The leaves thereof have a harsh binding quality, and are good to strengthen and fasten loose teeth. The decoction of the leaves thereof, and of olive-leaves together, in vinegar and water, is exceeding good to wash the mouth and throat when swelled by sharp humours falling into them; restores the uvula or palate of the mouth to its right place, when fallen down; it also stays the rheums that fall upon the jaws. The kernels of the fruit hereof, taken before they are ripe, dried and made into powder, and drunk in any liquid, stop looseness of the belly, and all sorts of fluxes. Of the roots, being steeped under ground, then boiled, and beaten a long time afterwards, bird-lime is made to catch small birds. The leaves, boiled in lye, keep the hair from falling off the head, and change the colour into black.

### M A Y W E E D. COTULA. ANTHEMIS.

**KINDS AND NAMES.** THERE are three sorts: 1. *Cotula fætida*, or *Anthemis*, stinking mayweed. 2. *Cotula non fætida*, mayweed with no scent. Stinking mayweed groweth more upright than that which hath no smell, or than common camomile; neither of them creep or run on the ground as camomile doth; the leaves are longer and larger than those of camomile, yet very like unto it, but of a paler-green colour; the one sort hath a very strong smell, the other no scent at all; the

flowers are like those of camomile, but larger; there is also a sort of mayweed found in various parts of the kingdom, which hath double flowers, almost as large as double camomile flowers, which is called *Cotula flore pleno*.

**PLACE.** The stinking mayweed groweth abundantly among corn, and will blister the hands of the reapers; that which stinketh not groweth also very plentifully, wild, in many places, and often amongst wild camomile.

**TIME.** They flower all the summer-months, some earlier and some later.

**GOVERNMENT AND VIRTUES.** Mayweed is governed by Mars; yet Galen saith the sophi of the Egyptians consecrated camomile to the Sun, which is much of the same temperature; but the stinking mayweed is more hot and dry, and is used for the same purposes as camomile, viz. to dissolve tumours, expel wind, and to ease pains and aches in the joints and other parts; it is also good for women whose matrix is fallen down, or loosened from one side to the other, by bathing their feet in a decoction thereof made in water. It is likewise good to be given to smell to by such as are troubled with the rising or suffocation of the matrix.

#### M A D W O R T. ALYSSUM.

**PLACE.** IT is often sown in gardens. The seed comes from Italy.

**TIME.** It flowers and flourishes in May; the seed is ripe in August.

**QUALITIES AND VIRTUES.** It is dry, digesting, and scouring. It healeth the bite of a mad dog, the morphew, sun-burning, &c. It also heals wounds inwardly and outwardly, cancers, and filthy ulcers; and digesteth clotted blood.

#### M A N D R A K E. ATROPA.

THE mandrake is male and female.

**PLACE.** It grows in hot regions; woods, mountains, and gardens.

**TIME.** It springs in March, flowers in April; the fruit is ripe in August.

**QUALITIES AND VIRTUES.** It is of a cold nature. The root is phlegmatic, and may be eaten with pepper and hot spices. The apples are cold and moist, the bark of the root cold and dry, and the juice is good in all cooling ointments. The dried juice of the root, taken in a small quantity, purgeth phlegm and melancholy. In collyriums, it healeth pains of the eyes. In a pessary, it draweth forth the dead child and secundine. The green leaves, bruised with axungia and barley-meal, heal all hot swellings and inflammations; and, applied to the parts, consume hot ulcers and imposthumes. A suppository made of the juice, put into the fundament,

causeth sleep. Infused in wine, and drunk, it causeth sleep, and healeth pains; the apples smelt to, or the juice taken in a small quantity, also cause sleep. The seed and fruit do cleanse the womb; the leaves heal knots in the flesh, and the roots heal St. Anthony's fire, &c. and, boiled with ivy, mollify the same. The oil of mandrakes is very cold; yet it may be anointed upon the temples and noses of those that have a phrenzy; if the patient sleep too long, dip a sponge in vinegar, and hold it to the nose. Also, it heals vehement pains of the head, and the tooth-ach, when applied to the cheeks and jaws, and causeth sleep.

### M U S H R O O M. AGARICUS.

**D E S C R I P T I O N.** Mushrooms are plants more perfect than many people imagine. They have a regular root, a stalk consisting of several arrangements of fibres, the interstices of which are filled up with a parenchymatous substance, leading from the root to the head or umbel; the under side of this umbel is full of lamellæ, or chives, every one of which is a regular pod, or seed-vessel. If these lamellæ are examined in their several states, the seeds in them may be easily discovered, and are always found to be of a size and degree of maturity proportioned to the state of the plant at the time. They have each of them also a siliquaceous aperture lengthwise, the seeds lying in rows ready to fall through it. The plant is easily and regularly propagated through these, and not only may be raised from seed, but, like many other plants, may be propagated by roots; several filaments at the root producing tubercles, in the manner of the potatoe, from each of which there will arise new roots and a new plant. The periods of vegetation to this plant are also sufficiently regular; and the common opinion, of its springing up in a night, and perishing in a day, has no foundation in reality; for, in the common way of raising them on hot-beds, it is easy to find, that they often stand a fortnight or longer, from their first appearance, before they are fit for the table.

Mr. Bradley mentions an hundred kinds of mushrooms which he has seen in England, besides those very numerous small ones which constitute the mouldiness of liquors, fruits, &c. Mathiolus mentions mushrooms which weighed thirty pounds each, and were as yellow as gold. Fer. Imperatus tells us, he saw some which weighed about one hundred pounds apiece; and the Journal des Scavans furnishes us with an account of some, growing on the frontiers of Hungary, which made a full cart-load.

The poison of mushrooms has been much talked of by several persons; but there seems to be no certain account of any body's having ever been injured by eating the common

common mushroom; though there are perhaps some kinds of them that are truly poisonous. The ancients have taken great pains to distinguish the several kinds of them, that the world might know the hurtful from the safe. The *boletus*, mentioned by Juvenal, on account of the death of Claudius, is sufficiently described by Pliny. Clusius, among the moderns, has described a vast number of different species, every-where distinguishing the esculent and wholesome from the poisonous and pernicious kinds. The feveral authors who have treated of them since the time of Clusius, have all mentioned the effects of some or other of the poisonous kinds, and there are numerous instances of the mischief done by them at one time or other. The true eatable mushroom is distinguished from the poisonous and unpleasant kinds by these marks: When young, it appears of a roundish form, like a button, the stalk as well as the button being white, and the fleshy part very white when broken, the gills within being livid. As they grow larger, they expand their heads by degrees into a flat form, and the gills underneath are of a pale flesh-colour; but, as they stand long, become blackish.

**VIRTUES.** The Laplanders have a method of using *funguses*, or toadstools as we call them, (which are of the same genus with the mushroom,) to cure pains. They collect the largest funguses which they find on the bark of beech and other large trees, and dry them for use. Whenever they have pains in their limbs, they use some of this dry matter; pulling it to pieces with their fingers, they lay a small heap of it on the part nearest to where the pain is situated, and set it on fire. In burning away, it blisters up the part, and the water discharged thereby generally carries off the pain. It is a coarse and rough method, but generally a very successful one, especially when the patient has prudence enough to apply it in time, and resolution enough to bear the burning to a necessary degree.

#### NAILWORT, OR WHITLOW-GRASS. DRABA.

**DESCRIPTION.** THIS very small and common herb hath no roots, save only a few strings; neither doth it ever grow to be above a hand's-breadth high; the leaves are very small, and something long, not much unlike those of chickweed, amongst which rise up many slender stalks, bearing numerous white flowers one above another, which are exceeding small; after which come small flat pouches containing seed, which is also very small, but of a sharp taste.

**PLACE.** It grows commonly upon old stone and brick walls, and sometimes in dry gravelly grounds, especially if there be grass or moss near to shadow it.

TIME

TIME. They flower very early in the year, sometimes in January and in February; before the end of April they are no longer to be found.

VIRTUES. It is held to be an exceeding good remedy for those imposthumes in the joints, and under the nails, which they call whitlows, felons, adicoms, and nail-wheals.

### N E P, OR C A T M I N T. NEPETA.

DESCRIPTION. COMMON garden nep shooteth forth hard four-square stalks with a hoariness on them, a yard high or more, full of branches, bearing at every joint two broad leaves, somewhat like balm, but longer-pointed, softer, whiter, and more hoary, nicked about the edges, and of a strong sweet scent. The flowers grow in large tufts at the tops of the branches and underneath them, likewise on the stalks, many together, of a whitish purple colour. The roots are composed of many long strings or fibres, fastening themselves strongly in the ground, and retaining their leaves green all the winter.

PLACE. It is only nursed up in our gardens.

TIME. It flowereth in July, or thereabouts.

GOVERNMENT AND VIRTUES. It is an herb of Venus. Nep is generally used by women, being taken either inwardly or outwardly, either alone or with other convenient herbs, in a decoction to bathe them, or to sit over the hot fumes thereof, and, by the frequent use thereof, it taketh away barrenness, and the wind, and pains of the mother. It is also used for pains of the head arising from any cold cause, such as catarrhs, rheums, &c. and for swimming and giddiness thereof, and is of especial use for expelling wind from the stomach and belly. It is also effectual for the cramp, or other pains occasioned by cold; and is found serviceable for colds, coughs, and shortness of breath. The juice thereof drunk in wine, helps bruises. The green herb, bruised, and applied to the part for two or three hours, easeth the pain arising from the piles. The juice also, being made up into an ointment, is effectual for the same purpose. Washing the head with a decoction thereof taketh away scabs; and may be used to the like effect on other parts of the body.

### N E T T L E S. URTICA.

NETTLES are so well known, that they need no description.

GOVERNMENT AND VIRTUES. This herb Mars claims dominion over. Nettle-tops, eaten in the spring, consume the phlegmatic superfluities in the body which the

the coldnes and moisture of winter hath left behind. The roots or leaves boiled, or the juice of either of them, or both, made into an electuary with honey or sugar, is a safe and sure medicine to open the pipes and passages of the lungs, obstructions in which is the cause of shortness of breath, and helpeth to expectorate tough phlegm, as also to raise the imposthumated pleurisy, and evacuate it by spitting; the juice of nettles, used as a gargle, allayeth the swelling of the almonds of the throat; it also effectually settles the palate of the mouth in its place, and heals and tempers the soreness and inflammation of the mouth and throat. The decoction of the leaves in wine, being drunk, is very efficacious in most of the diseases peculiarly incident to the female sex; and is equally serviceable, when applied externally, mixed with myrrh. The decoction also, or the seed, provoketh urine, and has hardly ever been known to fail in expelling the gravel and stone from the reins and bladder; killeth worms in children; easeth the spleen occasioned by wind, and expelleth the wind from the body; though some think them only a provocative to venery. The juice of the leaves, taken two or three days together, stayeth bleeding at the mouth. The seed, being drunk, is a remedy against the stinging of venomous creatures, the bite of a mad dog, the poisonous qualities of hemlock, henbane, nightshade, mandrake, or other such-like herbs, that stupify and dull the senses; as also the lethargy, especially if used outwardly, by rubbing the forehead and temples in lethargic cases, and the places bitten or stung by beasts, with a little salt. The distilled water of the herb is also effectual (although not so powerful) for the diseases aforesaid, and for outward wounds and sores, to wash them, and to cleanse the skin from morphew, leprosy, and other discolourings thereof. The seed, or leaves, bruised, and put into the nostrils, stayeth the bleeding thereof, and taketh away the flesh growing in them, called *polypus*. The juice of the leaves, or the decoction of them, or of the roots, is very good to wash either old, rotten, or stinking, sores; fistulas, and gangrenes, and such as are fretting, eating, and corroding; scabs, manginess, and itch, in any part of the body; as also green wounds, by washing them therewith, or applying the green herb bruised thereunto, even although the flesh should be separated from the bones. The same, on being applied to the limbs, when wearied, refresheth them, and strengtheneth, drieth, and comforteth, such places as have been put out of joint, after having been set again; as also such parts of the human body as are subject to the gout or other aches, greatly easing the pain thereof; and the defluxion of humours upon the joints or sinews it also relieveth, by drying up or dispersing the defluxions. An ointment made of the juice, oil, and a little wax, is exceedingly good to rub cold and benumbed members. A handful of green nettles, and another of wall-wort, or Dane-wort, bruised and applied

simply of themselves, to the gout, sciatica, or joint-achs, in any part, hath been found to be an admirable help in complaints of that nature.

NIGHTSHADE. SOLANUM.

**DESCRIPTION.** COMMON nightshade hath an upright, round, green, hollow, stalk, about a foot or half a yard high, shooting forth into many branches, whereon grow numerous green leaves, somewhat broad and pointed at the ends, soft and full of juice, somewhat like unto basil, but larger, and a little unevenly dented about the edges; at the tops of the stalks and branches come forth three or more white flowers, composed of five small pointed leaves apiece, standing on a stalk together one above another, with yellow pointels in the middle, composed of four or five yellow threads set together, which afterwards turn into so many pendulous green berries of the bulk of small pease, full of green juice, and small whitish round flat seed lying within it. The root is white, and a little woody when it hath given flowers and fruit, with many small fibres at it. The whole plant is of a watery insipid taste; but the juice within the berries is somewhat viscous, and of a cooling and binding quality.

**PLACE.** It groweth wild in this kingdom, in rubbish, and the common paths and sides of hedges, in fields; and also in gardens without any planting.

**TIME.** It dieth annually, and riseth again of its own sowing; but springeth not until the latter end of April at the soonest.

**GOVERNMENT AND VIRTUES.** It is a cold saturnine plant. The common nightshade is wholly used to cool hot inflammations, either inwardly or outwardly, being no ways dangerous, as the other nightshades are; yet it must be used moderately; the distilled water only of the whole herb is fittest and safest to be taken inwardly; the juice, being clarified and mixed with a little vinegar, is very good to wash the mouth and throat, when inflamed. Outwardly, the juice of the herb or berries, with a little vinegar and ceruse, pounded together in a leaden mortar, is very good to anoint all hot inflammations in the eyes; it is also very good for the shingles, ringworms, and in all running, fretting, and corroding, ulcers; and in most fistulas, if the juice be mixed with hen's-dung and applied thereto. A cloth, wet in the juice, and applied to the testicles, when swelled, giveth much ease, as also to the gout which ariseth from hot and sharp humours. The juice dropped into the ears easeth pains thereof, arising from heat or inflammation. Pliny saith, it is good for hot swellings under the throat. Care must be taken that the deadly nightshade be not mistaken for this.

DEADLY

## DEADLY NIGHTSHADE. ATROPA.

DESCRIPTION. THE flower is bell-shaped; it hath a permanent empalement of one leaf, cut into five parts; it hath five staminia rising from the base of the petal; in the centre is situated an oval germen, which becomes a globular berry, having two cells fitting on the empalement, and filled with kidney-shaped seed. It is of a cold nature; in some it causeth sleep; in others madnes, and, shortly after, death.

This plant should not be suffered to grow in any places where children resort, for it is a strong poison; several instances having happened where children have been killed by eating the berries.

There is a remarkable instance of the direful effects of this plant recorded in Buchanan's History of Scotland; wherein he gives an account of the destruction of the army of Sweno, when he invaded Scotland, by mixing a quantity of the juice of these berries in the drink which the Scots, by the truce, were to supply them with; this so intoxicated the Danes, that the Scots fell upon them in their sleep, and killed the greatest part of them; so that there were scarcely men enough left to carry off their king.

## WOODY NIGHTSHADE. SOLANUM.

CALLED also *bitter sweet*, *dulc' amara*, and *amara dulcis*.

PLACE. It grows by the fides of hedges, and in moist ditches, climbing upon the bushes; with winding, woody, but brittle, stalks.

TIME. It is perennial, and flowers in June and July.

VIRTUES. The roots and stalks, on first chewing them, yield a considerable bitterness, which is soon followed by an almost honey-like sweetnes; and they have been recommended in different disorders, as high resolvents and deobstruents. Their sensible operation is by sweat, urine, and stool; the dose from four to six ounces of a tincture made by digesting four to six ounces of the twigs in a quart of white wine.

## NAVEL-WORT, OR PENNY-WORT. COTYLEDON.

NAMES AND KINDS. It is called *umbilicus veneris*, and *herba coxendicum*. There are seven different kinds.

DESCRIPTION AND VIRTUES. 1. The small navel-wort is moist and somewhat cold and binding. It cooleth and repelleth, scoureth and consumeth.

2. The

2. The water penny-wort, called *Hydrocotyle*, is hot and ulcerating, like crow's-foot; and is very dangerous to cattle who may occasionally feed thereon.

3. The bastard Italian navel-wort, called *Craspula*, partakes of the true in cold and moisture.

4. The juice of the wall penny-wort healeth all inflammations and hot tumours, as the erysipelas, or St. Anthony's fire; it healeth kibed heels, being bathed therewith, and the leaves applied. The leaves and root break the stone, provoke urine, and cure the dropfy. The distilled water healeth sore kidneys, pains of the bowels, piles, gout, and king's evil.

5. The common or one-summer's navel-wort is diuretic, not very hot, but exceeding dry. It provoketh urine, and digesteth fliminess in the joints. Two drams drunk in wine will expel much urine from dropfical persons; and, applied, will also ease the gout.

6, 7. The spotted and small red-flowered navel-wort are cold and moist, like house-leek.

PLACE. The first sort groweth on stone walls; the other sorts are only found on the Alps.

TIME. They flower in the beginning of the spring, but flourish all the winter.

#### N I P P L E - W O R T. LAPSANA.

NAMES AND KINDS. OF this there are three kinds: 1. The ordinary nipple-wort, called in Latin *Lapsana vulgaris*. 2. The nipple-wort of Austria, called *Lapsana papillaris*. 3. Wild or wood bastard nipple-wort, *Soncho affinis*, *Lapsana sylvatica*. And in Prussia, as faith Camerarius, they call it *Papillaris*.

DESCRIPTION. 1. The ordinary nipple-wort groweth with many hard upright stalks, whereon grow dark-green leaves from the bottom to the top, but the higher the smaller; in some places without dents in the edges, and in others with a few uneven jags therein, somewhat like a kind of hankweed; the tops of the stalks have some small long branches, which bear many small star-like yellowish flowers on them, which turn into small seed; the root is small and fibrous; the plant yieldeth a bitter milk like that of the sow-thistle.

2. The Austrian nipple-wort hath slender, smooth, and solid, stalks, not easily broken, about two feet high, whereon stand, without order, somewhat long and narrow leaves, broadest in the middle, and sharp at the ends, waved a little about the edges, and compassing them at the bottom, yielding a little milk; from the upper joints, with the leaves, grow forth small firm branches, yet a little bending, bearing each of them four or five long green husks, and in them small purplish flowers

flowers of five leaves each, notched in at the broad ends, with some small threads in the middle; which turn into down, and are blown away by the wind; the root is small and shreedy, and lasteth many years.

3. The wild or wood bastard-nipplewort is like unto the first sort, but with somewhat broader leaves, and greater store of branches; but in the flowers and other parts not much different.

PLACE AND TIME. The first groweth common, almost every where, upon the banks of ditches and borders of fields; the second, Clusius saith, he found in Hungary and Saxony, and other places; the last is found near the sides of woods, and hedge-rows; they flower in summer, and the seed is ripe soon after.

GOVERNMENT AND VIRTUES. These are plants of Venus, and kindly endued with a peculiar faculty for the healing the sore nipples of women's breasts; for which reason Camerarius saith, that in Prussia they call it *papillaris*, because of its excellent virtues in healing women's sore breasts, as well as their nipples, when they are ulcerated; it having a singular healing quality therein; and is temperate in heat and dryness, with some tenuity of parts able to digest the virulence of sharp humours which break out in those parts.

#### NUTMEG-TREE, AND MACE. MYRISTICA.

NAMES AND DESCRIPTION. The fruit of this is called in Latin *nux myristica*, and in shops *nux moscata*. The tree groweth very tall, like our pear-trees; having leaves always green, somewhat resembling the leaves of the orange-tree; the fruit groweth like our walnuts, having an outward thick husk; which, when it grows ripe, openeth itself as the shell of the walnut doth; showing the nut within covered with the mace, which is of an orient crimson colour while it is fresh, but the air changeth the colour to be more dead and yellowish.

GOVERNMENT AND VIRTUES. The nutmegs and maces are both solar, of a temperature hot and dry in the second degree, and somewhat astringent, and are good to stay the lask; they are effectual in cold griefs of the head or brain, for palsies, shrinking of sinews, and diseases of the mother; they cause a sweet breath, and discus wind in the stomach or bowels, quicken the sight, and comfort the spirits; provoke urine, increase sperm, and are comfortable to the stomach; they help to procure rest and sleep, being laid to the temples, by allaying the distemper of the spirits.

The way to use it to procure rest is, to take two pieces of red-rose cake, and warm them in vinegar over a chafing-dish of coals, then scrape nutmeg upon the cakes, and bind it warm to the temples.

The mace is of the same property, but somewhat more warming and comforting, than the nutmeg; the thick oil that is drawn from both nutmegs and mace is good in pectoral complaints, to warm a cold stomach, help the cough, and to dry up distillations of rheum falling upon the lungs.

### THE OAK. QUERCUS.

THIS is so well known, (the timber thereof being the glory and safety of the British nation,) that it needeth no description.

GOVERNMENT AND VIRTUES. Jupiter owns the tree. The leaves and bark of the oak, and the acorn-cups, do bind and dry very much; the inner bark of the tree, and the thin skin that covereth the acorn, are most used to stay the spitting of blood and the bloody flux; the decoction of the bark, and the powder of the cups, stay vomiting, spitting of blood, bleeding at the mouth, or other fluxes of blood in men or women; lasks also, and the involuntary flux of natural seed. The acorns in powder taken in wine provoke urine, and resist the poison of venomous creatures. The decoction of acorns and the bark made in milk, and taken, resisteth the force of poisonous herbs and medicines, as also the virulence of cantharides, when any person, by eating them, hath the bladder ulcerated, and evacuate blood. Hippocrates faith, he used the fume of oak-leaves to women that were troubled with the strangling of the mother; and Galen applied them, being bruised, to cure green wounds. The distilled water of the oaken buds, before they break out into leaves, is good to be used either inwardly or outwardly, to afflue inflammations, and stop all manner of fluxes in man or woman; it is also singularly good in pestilential and hot burning fevers, as it resisteth the force of the infection, and allayeth the heat; it cooleth the heat of the liver, breaketh the stone in the kidneys, and stayeth women's courses. The decoction of the leaves hath the same effects. The water that is found in the hollow places of old oaks is very effectual against any foul or spreading scab. The distilled water, or decoction (which last is preferable) of the leaves, is one of the best remedies known for the fluor albus.

### OATS. AVENA.

THIS grain is well known. It is grown in every quarter of the globe where agriculture is carried on. Oats are sown in spring, and mown or reaped in September and October; but in the northern parts of this kingdom it is frequently much later before they are cut down.

**NATURE AND VIRTUES.** They are somewhat cold and drying, and are more used for food, both for man and beast, than for physic ; yet being quilted in a bag with bay-salt, made hot in a frying-pan, and applied as warm as can be endured, they ease pains and stitches in the side, and the cholic in the belly. A poultice made of the meal of oats and oil of bays, helpeth the itch, leprosy, and fistulas, and discusseth hard imposthumes. Oatmeal boiled in vinegar, and applied, takes away spots and freckles in the face and other parts of the body. It is also used in broth or milk, to bind those who have a lask, or other flux ; and with sugar it is good for them that have a cough or cold. Raw oatmeal is an unwholesome diet.

#### ONE-BLADE. CONVALLARIA.

**DESCRIPTION.** This small plant never beareth more than one leaf, except only when it riseth up with its stalk, in which case it beareth another, but seldom more, which are of a bluish-green colour, pointed, with many ribs or veins therein, like plantain ; at the top of the stalk grow many small white flowers, in the form of a star, smelling somewhat sweet ; after which come small berries, of a reddish colour when they are ripe. The root is small, of the bigness of a rush, lying and creeping under the upper crust of the earth, shooting forth in divers places.

**PLACE.** It groweth in moist, shadowy, and grassy, places of woods, in most parts of the kingdom.

**TIME.** It flowereth about May ; the berries are ripe in June ; it then quickly perisheth until the next year, when it springeth afresh from the old roots.

**GOVERNMENT AND VIRTUES.** It is a precious herb of the Sun. Half a dram, or at most a dram, in powder, of the roots, taken in wine and vinegar, of each equal parts, and the party laid directly down to sweat thereupon, is held to be a sovereign remedy for those that are infected with the plague, and have a sore upon them, by expelling the poison and infection, and defending the heart and spirits from danger. It is an exceeding good wound-herb, and is therefore used, with others of the like nature, in making compound balms for curing wounds, either whether they are fresh and green, or old and malignant, and especially if the finewses have been burnt.

Pena and Lobel severally made experiments of the quality of this plant upon two dogs, and found it was not dangerous, but effectual to expel the deadly operation of corrosive sublimate and arsenic.

## O R C H I S. ORCHIS.

IT hath a great variety of names, though most generally known by this.

**DESCRIPTION.** To enumerate all the different sorts of it is needless; a description of the roots will be sufficient, which are to be used with some discretion. They have each of them a double root within, some of them round, others like a hand; these roots alter every year alternately; when the one riseth and waxeth full, the other groweth lank and perisheth; now it is those which are full grown that are to be used in medicine, the other being either of no use at all, or else, according to some, thwarting the operation of the full-grown root, and undoing what otherwise it might have effected.

**TIME.** One or other of them may be found in flower from the beginning of April to the latter end of August.

**GOVERNMENT AND VIRTUES.** They are hot and moist in operation; under the dominion of Venus, and provoke lust exceedingly; which, it is said, the dry and withered roots restrain again; they are held to kill worms in children; also, being bruised and applied to the place, to help the king's evil.

## O N I O N S. ALLIUM.

THEY are so well known, that their description is unnecessary.

**GOVERNMENT AND VIRTUES.** Mars owns them. They possess the quality of drawing corruption to them; for, if you peel one and lay it upon a dung-hill, you will find it rotten in half a day, by drawing putrefaction to it; it is therefore natural to suppose they would have the same attractive power if applied to a plague-sore.

Onions are flatulent, or windy; yet do they whet the appetite, increase thirst, and ease the belly and bowels; provoke the menses; help the bite of a mad dog, and other venomous creatures, when used with honey and rue, and increase sperm; especially the seed of them; they also kill the worms in children, if they drink the water fasting wherein they have been steeped all night. Being roasted under the embers, and eaten with honey, or sugar and oil, they conduce much to help an inveterate cough, and expectorate the tough phlegm. The juice being snuffed up into the nostrils, purgeth the head, and helpeth the lethargy; yet the eating them too frequently occasions the head-ach. The eating of onions, fasting, with bread and salt, is held to be a good preservative against infection. If a great onion is made

hollow; filling the place with good treacle, afterwards roasting it on the embers, then throwing away the outward skin, and beating the remainder well together, is accounted a sovereign remedy for either the plague-fore or any other putrid ulcer. The juice of onions is reckoned good for scalds or burns, occasioned either by fire, boiling water, or gunpowder; and, used with vinegar, taketh away all blemishes, spots, and marks, in the skin; and, dropped into the ears, easeth the pain and noise thereof. If applied, beaten together with figs, they help to ripen, and cause suppuration in, imposthumes. Onions, if bruised, and mixed with salt and honey, will effectually destroy warts, causing them to come out by the roots.

LEeks participate of nearly the same quality as onions, though not in so great a degree. They are said to be an antidote against a surfeit occasioned by the eating of mushrooms, being first baked under the embers, and then taken when sufficiently cool to be eaten; being boiled, and applied warm, they help the piles.

## ORPINE. SEDUM.

**DESCRIPTION.** COMMON orpine riseth up with divers round brittle stalks thick set with fat and fleshy leaves, without any order, and very little dented about the edges, of a pale green colour; the flowers are white, or whitish, growing in tufts, after which come small chaff-like husks, with seed like dust in them. The roots are various in their shape and size, and the plant does not grow so large in some places as in others.

PLACE. It is to be found in almost every part of this kingdom, but most commonly in gardens, where it groweth to a larger size than that which is wild; it is also to be found in the shadowy sides of fields and woods.

TIME. It flowereth about July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** The Moon owns this herb. Orpine is seldom used in inward medicines with us, although Tragus saith, from experience in Germany, that the distilled water thereof is profitable for gnawings or excoriations in the stomach and bowels, and for ulcers in the lungs, liver, or other inward parts; as also in the matrix; being drunk for several days successively, it helpeth all those diseases; he also says it stayeth the sharpnes of the humours in the bloody flux, and other fluxes of the body, or in wounds; the root thereof hath also the same effect. It is used outwardly to cool any heat or inflammation upon any hurt or wound, and easeth the pains of them; as also to heal scalds or burns. The juice thereof beaten with some salad-oil, and therewith anointing the parts, or the leaf bruised and laid to any green wounds in the hands and legs, doth quickly heal them; and, be-

ing bound to the throat, much helpeth the quinsy; it is likewise found serviceable in ruptures.

The juice thereof, made into a syrup with honey or sugar, may be safely taken, a spoonful or two at a time, and with good effect, for a quinsy; and will be found more speedy in operation, as well as pleasant in taste, than some other medicines prescribed for that disorder.

### O L I V E - T R E E. OLEA. ELÆGNUS.

KINDS AND NAMES. Of these there are the tame and manured olive, and the wild olive-tree; the first is called in Latin *OLEA*; but the wild kind, or *Oleaaster*, is now considered as belonging to a different genus, *ELÆGNUS*.

DESCRIPTION. 1. *OLEA*, the common olive, has a small tubulous impalement of one leaf, cut into four segments at the top; the former consists of one petal, which is tubulous, cut at the brim into four segments; it has two short stamens, terminated by erect summits, and a roundish germen, supporting a short single style, crowned by a thick bifid stigma; the germen afterwards turns to an oval smooth fruit, or berry, with one cell, inclosing an oblong oval nut. In Languedoc and Provence, where the olive-tree is greatly cultivated, they propagate it by truncheons split from the roots of the trees; for, as these trees are frequently hurt by hard frosts in winter, so, when the tops are killed, they send up several stalks from the root; and, when these are grown pretty strong, they separate them with an axe from the root; in the doing of which they are careful to preserve a few roots to the truncheons; these are cut off in the spring after the danger of the frost is over, and planted about two feet deep in the ground. These trees will grow in almost any soil; but, when planted in rich moist ground, they grow larger, and make a finer appearance, than in poor land; but the fruit is of less esteem, because the oil made from it is not so good as that which is produced in a leaner soil; chalky ground is esteemed best for them; and the oil, made from the trees growing in that sort of land, is much finer, and will keep longer than the other. In England, the plants are only preserved by way of curiosity, and are placed in winter in the green-house for variety.

2. *ELÆGNUS*, or *Oleaaster*, the wild olive-tree, groweth somewhat like unto the manured, but it hath harder and smaller leaves, and thicker set on the branches, with sundry sharp thorns among the leaves; the blossoms and fruit come forth in the same manner as the other do, and in as great plenty, but much smaller, and scarcely coming at any time to ripeness where they naturally grow; but, where they do become ripe, they are small, with crooked points, and black. Of

the olives hereof oil is sometimes made, which is colder and more astringent than the other, and harsher in taste, and greenish in colour; but the olives are much respected, and gathered to be eaten.

**PLACE AND TIME.** Both kinds of olives grow in the hot countries only; in a cold climate they will never bear fruit, nor hardly endure a winter; the manured is planted where it groweth, and, according to the nature of the soil or climate, produceth larger or smaller olives, and in more or less plenty; and oil sweeter or more strong in taste. The finest and sweetest oil comes from the isles in the Mediterranean sea, as Zante, Cerigo, &c. that from Majorca, &c. is more full and fat; the oil from Provence, in France, is stronger and hotter tasted. The wild olives grow naturally in Spain, Portugal, Italy, and many other countries. They flower in June and July, but their fruit is not ripe until November or December.

**GOVERNMENT AND VIRTUES.** The olive-tree is a plant of Venus, and of gentle temperature. The green leaves and branches of the olive-tree, but much more of the wild olive, do cool and bind; and the juice thereof, mixed with vinegar, is peculiarly serviceable in all hot impostumes, inflammations, swellings, St. Anthony's fire, fretting or creeping ulcers, and cankers in the flesh or mouth. The same also stayeth the bleeding of wounds, being applied to the place; the said juice being dropped into the eyes stayeth the distillation of hot rheums into them, and cleareth the sight from films or clouds that offend the sight, or any ulcer that doth breed therein, or ulcers in the ears.

Pickled olives do stir up an appetite to meat, and, although they be hard of digestion, yet are pleasing to the stomach, being apt to putrefy therein; they are not good for the eye-sight, and cause the head-ach; if they be dried, and applied to fretting and corroding ulcers, they stop their progress, and heal them; and take away the scars of carbuncles, or plague-sores. The pickled olives burned, beaten, and applied into wheals, stop their further increase, and hinder them from rising; they cleanse foul ulcers, help gums that are spongy, and fasten loose teeth.

The water, that is taken from the green wood when heated in the fire, healeth the scurf or scab in the head, or other parts; the olive-stones, being burned, are used for the same purposes, and also to heal foul spreading ulcers; and, being mixed with fat and meal, they take away the ruggedness of the nails.

The other properties of the olive are contained in the oil, and the foot or bottom of the tree. First, the oil has divers and variable virtues, according to the ripeness or unripeness of the fruit whereof it is made, and then of the time and age thereof, and of the washing it from the salt therewith some of it is made. The oil that is made

made of unripe olives is more cooling and binding than that which is made of those that are ripe ; which, when it is fresh and new, is moderately heating and moistening : but, if it be old, it hath a stronger force to warm and discus, which properties are perceptible by its sweetness ; for, if the oil be harsh, it is more cooling than warming ; and, if that oil be washed, it taketh from it all harshness.

The green oil of unripe olives, while it is fresh, is most welcome to the stomach ; it strengtheneth the gums, and fasteneth the teeth, if it be held in the mouth for any time ; and, being drunk, it preventeth too great a perspiration in those who are subject thereunto. The sweet oil is of most use in salads, &c. being pleasing to the stomach and taste ; but the older the oil is, the better it is for medicine, both to warm any part, and discus any thing where needful ; and to open and move the belly downwards ; and is most effectual against all poisons, especially those that exulcerate the intestines, or, not having passed down so low, irritate the stomach, the oil either bringing it up by vomiting, or at least hindering its malignity from spreading. It is also a principal ingredient in almost all salves, helping as well the form as the virtue thereof.

The foot or dregs of the oil, the older it is, is the better for various purposes ; as to heal the scab in man or beast, being used with the decoction of lupines ; it is very profitably used for ulcers of the fundament or privy parts, when mixed with honey, wine, and vinegar ; it healeth wounds, and helpeth the tooth-ach, being held in the mouth. If it be boiled in a copper vessel to the thickness of honey, it bindeth much, and is effectual for all the purposes for which lycinus may be used ; if it be boiled with the juice of unripe grapes to the thickness of honey, and applied to the teeth, it will cause them to fall out.

### O R A N G E - T R E E. C I T R U S.

**KINDS AND NAMES.** Of oranges we shall describe five kinds or sorts. They were called by the ancients *mala aurea Hesperidum*, the golden apples of Hesperides ; and therefore Hercules made it one of his labours to kill the dragon that kept the garden where they were, and to bring them away with him. The flowers of the orange-tree are called *napha* ; and the ointment that is made of them *unguentum ex napha*. Oranges are now generally called *aurantia* ; but the systematic name for both oranges and lemons is *Citrus*.

**DESCRIPTION.** 1. The ordinary orange-tree, *Citrus aurantia vulgaris*, groweth often to a very great height and thickness, with large spreading arms and branches, with

with a rougher bark below, and green on the branches; yet it is smaller in less fruitful soils; sparingly armed with sharp but short thorns; the leaves are somewhat similar to those of the lemon, but that each leaf hath a piece of a leaf set under it, are not dented at all about the edges, and are full of small holes in them; the flowers are whitish, and of a strong sweet scent; the fruit hereof is round, with a thick bitter rind, of a deep yellowish red colour, which from it taketh the name of an orange colour, having a soft, thin, white, loose, substance next to the outer coloured rind; and a sour juice lying mixed amongst small skins in several parts, with seed between them in partitions; the juice of some is less sour than others, and of a taste between sour and sweet, nearly like wine.

2. The wild or crab orange-tree, *aurantia sylvestris*. This tree groweth wild as our crab-trees do, and is fuller of branches, and thicker set with thorns, than the former.

3. The apple-orange, called in Latin *aurantia cortice dulci eduli*. The Spaniards call this orange *naranja cavel*. This differeth from others not so much in the colour of the outer bark, which is of a deep gold yellowish-red, but in the whole fruit, which is throughout almost as firm as an apricot, and yet distinguished into parts, in the inside, like others; which, together with the bark and rind, is to be eaten like an apple; the rind not being rough and bitter as the others.

4. The orange without seeds, *aurantia unico grano*. This only differeth from that orange which has the best sour juice, in having but one grain or seed in the whole juice lying within it.

5. The dwarf orange-tree, *aurantia pumilio*. The stock of this dwarf-tree is low, and the branches grow thick, well stored with leaves, but they are smaller and narrower than the other; the flowers also are many, and thick set on the branches, which bear fruit more plentifully than the former, though of a smaller size, yet equally well-coloured.

PLACE AND TIME. All these sorts of oranges, as well as the lemons and citrons, are brought unto us from Spain and Portugal; they hold time with the lemons, having their leaves always green, with green blossoms and ripe fruit constantly together.

GOVERNMENT AND VIRTUES. All these trees and fruits are governed by Jupiter. The fruit is of different parts and qualities; the rind of the oranges is more bitter and hot than those of the lemons or citrons, and are therefore preferable to warm a cold stomach, breaking the wind, and cutting the phlegm therein; after the bitterness is taken from them, by steeping them in water for sundry days, and then

preferred either wet or dry, besides their use in banquets, they are very effectual for strengthening the heart and spirits. Though the juice is inferior to those of the citron and lemon, and fitter for meat than medicine, yet four or five ounces of the juice taken at a time, in wine or ale, will drive forth putrid humours from the inward parts by sweat, and strengthen and comfort the heart. The distilled water of the flowers, besides the odoriferous scent it has as a perfume, is good against contagious diseases and pestilential fevers; by drinking thereof at sundry times, it helpeth also the moist and cold infirmities of the womb; the ointment that is made of the flowers is good to anoint the stomach, to help the cough, and expectorate cold raw phlegm; and to warm and comfort the other parts of the body.

#### P A R S L E Y. APIUM.

THIS is so well known, that it needs no description.

**G O V E R N M E N T A N D V I R T U E S.** It is under the dominion of Mercury, and is very comfortable to the stomach; it helpeth to provoke urine, women's courses, and to break wind both in the stomach and bowels; it a little openeth the body, but the root possesseth this last virtue in a greater degree, opening obstructions both of the liver and spleen; and is therefore accounted one of the five opening roots; Galen commendeth it against the falling-sicknes, and says it mightily provokes urine, if boiled and eaten like parsnips. The feed is also effectual to provoke urine and women's courses, expel wind, break the stone, and ease the pains and torments thereof, or of any other part of the body, occasioned by wind. It is also effectual against the venom of any poisonous creature, and the dangerous consequences which arise from the taking of litharge; and is good against a cough. The distilled water of parsley is a familiar medicine with nurses to give to children when they are troubled with wind in the stomach or belly, which they call the frets; it is also greatly useful to grown persons. The leaves of parsley, when used with bread or meal, and laid to the eyes that are inflamed with heat, or swollen, doth greatly relieve them; and being fried with butter, and applied to women's breasts that are hard through the curdling of the milk, it quickly abateth the hardnes; it also taketh away black and blue marks arising from bruises or falls. The juice dropped into the ears with a little wine, easeth the pains thereof. Tragus recommends the following, as an excellent medicine to help the jaundice and falling-sicknes, the dropsy, and stone in the kidneys, viz. Take of the seeds of parsley, fennel, anise, and caraways, of each an ounce; of the roots of parsley, burnet saxifrage, and caraways, of each one ounce and a half; let the seeds be bruised, and the roots washed and cut small;

let

let them lie all night in steep in a bottle of white wine, and in the morning be boiled in a close earthen vessel until a third part or more be wasted, which, being strained and cleared, take four ounces thereof morning and evening, first and last, abstaining from drink after it for three hours. This openeth obstructions of the liver and spleen, and expelleth the dropsy and jaundice by urine.

#### PARSLEY-PERT, or PARSLEY-BREAKSTONE. APHANES.

**D E S C R I P T I O N.** THE root, although it be small and thready, yet it continues many years, from whence arise many leaves lying along upon the ground, each standing upon a long small footstalk, the leaves as broad as a man's nail, very deeply indented on the edges, somewhat like a parsley-leaf, but of a very dusky-green colour. The stalks are very weak and slender, about three or four fingers in length, set so full of leaves that they can hardly be seen, either having no footstalk at all, or but very short. The flowers are so small they can hardly be seen, and the seed is scarcely perceptible at all.

**P L A C E.** It is common through all parts of the kingdom, and is generally to be met with in barren, sandy, and moist, places. It may be found plentifully about Hampstead-heath, in Hyde-Park, and in other places near London.

**T I M E.** It may be found all the summer through, from the beginning of April to the end of October.

**G O V E R N M E N T A N D V I R T U E S.** Its operation is very prevalent to provoke urine and to break the stone. It is a very good salad-herb, and would pickle for winter-use as well as samphire. It is a very wholesome herb. A dram of the powder of it, taken in white wine, brings away gravel from the kidneys insensibly, and without pain. It also helps the strangury.

#### P A R S N I P. PASTINACA.

THE garden kind thereof is so well known (the root being commonly eaten,) that to particularise it is totally unnecessary; but, the wild kind being of more physical use, the following is its

**D E S C R I P T I O N.** The wild parsnip differeth little from that of the garden, but does not grow so fair or large, nor has it so many leaves; the root is shorter, more woody, and not so fit to be eaten; therefore the more medicinable.

**P L A C E.** The name of the first sheweth the place of its growth.

The

The other groweth wild in divers places, as in the marshes by Rochester, and elsewhere, and flowereth in July; the seed being ripe about the beginning of August the second year after the sowing; seldom flowering the first year.

**GOVERNMENT AND VIRTUES.** The garden parsnip is under Venus. It is exceeding good and wholesome nourishment, though rather windy; it is said to provoke venery, notwithstanding which it fatteneth the body much if frequently used. It is also serviceable to the stomach and reins, and provoketh urine. But the wild parsnip hath a cutting, attenuating, cleansing, and opening, quality therein. It resisteth and helpeth the bitings of serpents, easeth pains and stiches in the fides, and dissolveth wind both in the stomach and bowels; it also provoketh urine. The root is often used, but the seed much more.

The wild parsnip being preferable to that of the garden, shows nature to be the best physician.

#### C O W - P A R S N I P. HERACLEUM.

**DESCRIPTION.** THIS groweth with three or four large, spread, winged, rough, leaves, lying often on the ground, or else raised a little from it, with long, round, hairy, footstalks under them, parted usually into five divisions, the two couples standing against each other, and one at the end, and each leaf being almost round, yet somewhat deeply cut in on the edges in some leaves, and not so deep in others, of a whitish-green colour, smelling somewhat strongly; among which ariseth up a round crested hairy stalk, two or three feet high, with a few joints and leaves thereon, and branched at the top, where stand large umbels of white, and sometimes reddish, flowers, and, after them, flat, whitish, thin, winged, seed, two always joined together. The root is long and white, with two or three long strings growing down into the ground, smelling likewise strong and unpleasant.

**PLACE.** It groweth in moist meadows, the borders and corners of fields, and near ditches, generally throughout the kingdom.

**TIME.** It flowereth in July, and seeds in August.

**GOVERNMENT AND VIRTUES.** Mercury hath the dominion over them. The seed hereof, as Galen saith, is of a sharp and cutting quality, and is therefore a fit medicine for the cough and shortness of breath, the falling-sickness, and the jaundice. The root is available to all the purposes aforesaid, and is also of great use to take away the hard skin that groweth on a fistula, by scraping it upon the part. The seed hereof, being drunk, cleanseth the belly from tough phlegmatic matter;

it easeth those that are liver-grown, and passions of the mother, either being drunk or the smoke thereof inhaled by fumigation; it raiseth such as have fallen into a deep sleep or lethargy, by burning it under their nose. The seed and root, being boiled in oil, and the head rubbed therewith, helpeth not only those labouring under a phrenzy, but also the lethargy or drowsy evil, and those that have been long troubled, when mixed with rue. It also helpeth the running scab and the shingles. The juice of the flowers, dropped into the ears that run and are full of matter, cleanseth and healeth them.

### P E A C H - T R E E. AMYGDALUS.

**DESCRIPTION.** THE peach-tree does not grow so large as the apricot-tree, yet it hath tolerably wide-spreading branches, whence spring smaller reddish twigs, whereon are set long and narrow green leaves, dented about the edges. The blossoms are larger than the plum, and of a light purple colour. The fruit is round, and sometimes as big as a middle-sized pippin; others are smaller, and differing in colour and taste, as russet, red, or yellow, watery or firm, with a frieze or cotton all over, a cleft therein like an apricot, and a rugged furrowed great stone within it, which contains a bitter kernel. It sooner waxeth old, and decayeth, than the apricot-tree.

**PLACE.** They are nursed up in gardens and orchards.

**TIME.** They flower in the spring, and fructify in autumn.

**GOVERNMENT AND VIRTUES.** Venus owns this tree, and by it opposeth the ill effects of Mars. Nothing is better to purge choler and the jaundice in children and young people, than the leaves of this tree made into a syrup or conserve, of which two spoonfuls at a time may be safely taken. The leaves of peaches bruised and laid on the belly, kill worms; and so they do also, if boiled in ale and drunk; they likewise open the belly; and, being dried, are a safe medicine to discus humours. The powder of them, strewed upon fresh bleeding wounds, stayeth their bleeding, and clofeth them up. The flowers, steeped all night in a little warm wine strained forth in the morning, and drunk fasting, do gently open the belly. A syrup made of them, as the syrup of roses is made, operates more forcibly than that of roses, as it provoketh vomiting, and discusfleth watery and hydroptic humours by the continuance thereof. The flowers made into a conserve produce the same effect. The liquor, which drops from the tree on its being wounded, is given in the decoction of colt's-foot to those that are troubled with the cough or shortness of

breath; by adding thereto some sweet wine, and putting also some saffron therein, it is good for those that are hoarse, or have lost their voice; it helpeth all defects of the lungs, and those that vomit or spit blood. Two drams thereof given in the juice of lemons, or of radishes, are good for those that are troubled with the stone. The kernels of the stones do wonderfully ease the pains and wringings of the belly, occasioned by wind or sharp humours; and make an excellent medicine for the stone, when done up in the following manner: Take fifty kernels of peach-stones, and one hundred of the kernels of cherry-stones, a handful of elder-flowers, fresh or dried, and three pints of muscadel; set them in a close pot into a bed of horse-dung for ten days; after which distil it in a glass, with a gentle fire, and keep it for use; three or four ounces of it may be drunk at a time. The milk or cream of these kernels being drawn forth with some vervain-water, and applied to the forehead and temples, procures rest and sleep to sick persons who cannot otherwise get it. By rubbing the temples with the oil drawn from the kernels, the same effect is produced. The said oil, put into clysters, or anointing the lower part of the belly, easeth the pain of the windy cholic, and, when dropped into the ears, relieveth pain in them; the juice of the leaves hath the like virtue; and, by rubbing the forehead and temples, it helpeth the megrim and all other pains in the head. If the kernels be bruised and boiled in vinegar, until they become thick, and applied to the head, it causeth the hair to grow upon bald places, or where it is too thin.

### P E A R - T R E E. PYRUS.

PEAR-TREES are so well known, that they need no description.

**GÖVERNMENT AND VIRTUES.** This tree belongs to Venus, as well as the apple-tree. For their physical use, they are best discerned by their taste. All the sweet or luscious sorts, whether manured or wild, tend to open the belly more or less; those, on the contrary, that are sour and harsh, have an astringent quality; the leaves of each possess the same contrariety of properties. Those that are moist are, in some degree, of a cooling nature; but the harsh or wild sorts are much more so, and are frequently used as repelling medicines; if the wild sorts be boiled with mushrooms, it maketh them the less dangerous. The said pears, boiled with a little honey, help much the oppression of the stomach, as indeed all sorts of them do more or less; but the harsher kinds are more cooling and binding. They are very useful to bind up green wounds, stopping the blood and healing the wound without further trouble or inflammation, as Galen saith he found by experience.

Wild

Wild pears sooner close up the lips of the green wounds than the others.

Schola Salerni advifeth to drink much wine after eating of pears, otherwise (it is said) they are as bad as poison; but, if a poor man find his stomach opprefed by eating pears, it is but working hard, which will have the same effect as drinking wine.

#### PELLITORY OR SPAIN. ANTHEMIS.

COMMON pellitory of Spain, if planted in gardens, thrives very well in this kingdom. There is a fort, growing wild in this country, which is very little, if at all, inferior to the other.

DESCRIPTION. Pellitory is a very common plant, yet must be diligently looked after to be brought to perfection. The root goes downright into the ground, bearing leaves long and finely cut upon the stalks, lying upon the ground, much larger than the leaves of camomile are; at the top it bears one fingle large flower at a place, having a border of many leaves, white on the upper fide, and reddish underneath, with a yellow thrum in the middle, not standing so close as that of camomile.

The other common pellitory, which groweth here spontaneously, hath a root of a sharp biting taste, scarcely discernible by the taste from that before described, from whence arise divers brittle stalks, more than a yard high, with narrow long leaves, finely dented about the edges, standing one above another up to the top. The flowers are many and white, standing in tufts like those of yarrow, with a small yellowish thrum in the middle. The feed is very small.

PLACE. The last groweth in fields, by the hedge-sides, and paths, almost every where in Britain.

TIME. It flowereth at the end of June, and in July:

GOVERNMENT AND VIRTUES. It is under the government of Mercury, and is one of the best purgers of the brain that grows. An ounce of the juice taken in a draught of muscadel, an hour before the fit of the ague comes, will assuredly drive away the ague, at the second or third time of taking it at furthest. Either the herb or root dried and chewed in the mouth, purgeth the brain of phlegmatic humours, thereby not only easing pains in the head and teeth, but alfo hindering the distilling of the brain upon the lungs and eyes, thereby preventing coughs, phthisics, and consumptions, the apoplexy, and falling-sickness. It is an excellent approved remedy in the lethargy. The powder of the herb or root, being snuffed up the nostrils, procureth sneezing, and easeth the head-ach. Being made into an ointment with hog's-lard, it takes away black and blue spots occasioned by blows or falls, and helps both the gout and sciatica.

PELLITORY

PELLITORY OF THE WALL. *PARIETARIA.*

**DESCRIPTION.** It riseth up with many brownish, red, tender, weak, clear, and almost transparent, stalks, about two feet high, upon which grow at the several joints two leaves somewhat broad and long, of a dark-green colour, which afterwards turn brownish, smooth on the edges, but rough and hairy, as the stalks are also. At the joints with the leaves, from the middle of the stalk upwards, where it spreadeth into some branches, stand many small, pale, purplish, flowers, in hairy rough heads or husks, after which come small, black, and rough seed, which stick to any cloth or garment they may chance to touch. The root is somewhat long, with many small fibres thereat, of a dark reddish colour, which abideth the winter, although the stalks and leaves perish, and spring afresh every year.

**PLACE.** It generally groweth wild, in most parts of the kingdom, about the borders of fields, by the sides of walls, and among rubbish. It prospereth well when brought up in gardens, and, if once planted on the shady side, it will afterwards spring up of its own sowing.

**TIME.** It flowereth in June and July, and the seed is ripe soon after.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Mercury. The dried herb pellitory made up into an electuary with honey, or the juice of the herb, or the decoction thereof made up with sugar or honey, is a singular remedy for an old or dry cough, shortness of breath, and wheesing in the throat. Three ounces of the juice thereof, taken at a time, greatly help the stoppage of urine, and expel the stone or gravel in the kidneys or bladder, and are therefore usually put among other herbs used in clysters to mitigate pains in the back, sides, or bowels, proceeding from wind, stoppage of urine, the gravel, or stone, as aforesaid. If the bruised herb, sprinkled with some muscadine, be warmed upon a tile, or in a dish, upon a few quick coals in a chafing-dish, and applied to the belly, it hath the same effect. The decoction of the herb, being drunk, easeth pains of the mother, and forwards the menses; it also easeth such complaints as arise from obstructions of the liver, spleen, and reins. The same decoction, with a little honey added thereto, is good to gargle a sore throat. The juice, if held awhile in the mouth, easeth pains in the teeth. The distilled water of the herb, drunk with some sugar, produceth the same effect; it also cleanseth the skin from spots, freckles, purples, wheals, sun-burn, morphew, &c. The juice, dropped into the ears, easeth the noise thereof, and taketh away the pricking and shooting pains therein. The same, or the distilled

water, assuageth hot and swelling impostumes, burnings and scaldings by fire or water; also hot tumours and inflammations, or breakings-out, &c. The said juice made into a liniment, with ceruse and oil of roses, cleanseth rotten ulcers, and stops the running sores in children's heads, and prevents the hair from coming off; it is likewise of great service to persons afflicted with the piles, as it immediately easeth their pain, and, being mixed with goat's tallow, relieveth the gout. The juice, or herb itself, bruised, with a little salt, is very effectual to cleanse fistulas and to heal them up safely; it is also of great benefit to any green wound. A poultice made hereof with mallows, and boiled in wine, mixed with wheat-bran, bean-flowers, and some oil, being applied warm to any bruised sinew, tendon, or muscle, doth, in a very short time, restore it to its original strength.

The juice of pellitory of the wall, clarified and boiled into a syrup with honey, and a spoonful of it drunk every morning, is very good for the dropsy.

#### P E N N Y R O Y A L. M E N T H A.

**D E S C R I P T I O N.** THE common pennyroyal is so well known, that it needeth no description.

There is another kind of pennyroyal, superior to the above, which differeth only in the largeness of the leaves and stalks; in rising higher, and not drooping upon the ground so much. The flowers of which are purple, growing in rundles about the stalk like the other.

**P L A C E.** The first, which is common in gardens, groweth also in many moist and watery places in this kingdom. The second is found wild in Essex, and divers places on the road to London to Colchester, and parts adjacent.

**T I M E.** They flower in the latter end of summer.

**G O V E R N M E N T A N D V I R T U E S.** This herb is under Venus. Dioscorides saith, That pennyroyal maketh tough phlegm thin, warmeth the coldnes of any part that it is applied to, and digesteth raw and corrupt matter: being boiled and drunk, it moveth the courses, and expelleth the dead child and after-birth; being mixed with honey and salt, it voideth phlegm out of the lungs. Drunk with wine, it is of singular service to those who are stung or bit by any venomous beast; applied to the nostrils, with vinegar, it is very reviving to persons fainting and swooning; being dried and burnt, it strengtheneth the gums, and is helpful to those that are troubled with the gout; being applied as a plaster, it taketh away carbuncles and blotches from the face; applied with salt, it helpeth those that are splenetic, or liver-grown. The de-

coction doth help the itch, if washed therewith; being put into baths for women to sit therein, it helpeth the swelling and hardness of the mother. The green herb bruised, and put into vinegar, cleanseth foul ulcers, and taketh away the marks of bruises and blows about the eyes, and all discolouring of the face by fire, and the leprosy, being drunk and outwardly applied; boiled in wine, with honey and salt, it helpeth the tooth-ach. It helpeth the cold griefs of the joints, taking away the pains and warming the cold parts, being fast bound to the place after bathing or sweating. Pliny addeth, that pennyroyal and mint together help faintings or swoonings, infused in vinegar, and put to the nostrils, or a little thereof put into the mouth. It easeth the head-ach, and the pains of the breast and belly, stayeth the gnawing of the stomach, and inward pains of the bowels; being drunk with wine, it provoketh the courses, and expelleth the dead child and after-birth; it helpeth the falling-sicknes: put into unwholesome or stinking water that men must drink, as at sea, and where other cannot be had, it maketh it less hurtful. It helpeth cramps or convulsions of the finews, being applied with honey, salt, and vinegar. It is very effectual for a cough, being boiled in milk and drunk, and for ulcers and sores in the mouth. Mathiolus saith, the decoction thereof, being drunk, helpeth the jaundice, and all pains of the head and finews that come of a cold cause; and that it helpeth to clear and quicken the eye-sight. Applied to the nostrils of those that have the falling-sicknes, or the lethargy, or put into the mouth, it helpeth them much, being bruised in vinegar, and applied. Mixed with barley meal, it helpeth burnings, and, put into the ears, easeth the pains of them.

#### PEONY, MALE AND FEMALE. PÆONIA.

**DESCRIPTION.** THE male peony riseth up with many brownish stalks, whereon grow a great number of fair green, and sometimes reddish, leaves, each of which is set against another upon a stalk without any particular division in the leaf. The flowers stand at the tops of the stalks, consisting of five or six broad leaves of a fair purplish-red colour, with many yellow threads in the middle, standing about the head, which after riseth to be the seed-vessel, divided into two, three, or four, rough crooked pods like horns, which, being full ripe, open and turn themselves down one edge to another backward, showing within them divers round, black, shining, seed, having also many red or crimson grains intermixed with the black, whereby it maketh a very pretty show. The roots are thick and long, spreading and running down deep into the ground.

The ordinary female peony hath many stalks, and more leaves than the male ; the leaves not so large, but nicked on the edges, some with great and deep, others with smaller, cuts and divitions, of a dark or dead green colour. The flowers are of a strong heady scent, most usually smaller, and of a more purple colour, than the male, with yellow thrums about the heads as the male hath. The seed-vessels are like horns, as in the male, but smaller ; the seed is black, but less shining. The roots consist of many thick and short tuberous clogs, fastened at the ends of long strings, and all from the head of the root, which is thick and short, and of the like scent with the male.

**PLACE AND TIME.** They grow in gardens, and flower usually about May.

**GOVERNMENT AND VIRTUES.** It is an herb of the Sun, and under the Lion. Physicians say, male peony roots are best; but male peony is best for men, and female peony for women. The roots are held to be of most virtue ; then the seeds ; next the flowers ; and, last of all, the leaves. The root of the male peony, fresh gathered, hath been found by experience to cure the falling-sicknes ; but the surest way is (besides hanging it about the neck, by which children have been cured) to take the root of the male peony washed clean and stamped somewhat small, and infuse it in sack for twenty-four hours at least ; afterwards strain it, and take, morning and evening, a good draught for sundry days together before and after a full moon ; and this will also cure older persons, if the disease be not inveterate and past cure, especially if there be a due and orderly preparation of the body, with posset-drink made of betony, &c. The root is also effectual for women that are not sufficiently cleansed after child-birth, and such as are troubled with the mother ; for which likewise the black seed, beaten to powder and given in wine, is available. The black seed also, taken before bed-time and in the morning, is very effectual for such as in their sleep are troubled with the disease called ephialtes or incubus, but we do commonly call it the night-mare, a disease which melancholy persons are subject unto : it is also good against melancholy dreams. The distilled water, or syrup made of the flowers, worketh the same effects that the root and the seed do, although more weakly. The female is often used for the purpose aforesaid, by reason the male is so scarce.

#### PEPPER-WORT, OR DITTA N D E R. LEPIDIUM.

**DESCRIPTION.** THE common pepper-wort fendoth forth somewhat long and broad leaves, of a light bluish-green colour, finely dented about the edges, and pointed at the ends, standing upon round hard stalks, three or four feet high, spreading many

many branches on all sides, and having many small white flowers at the tops of them, after which follow small seed in small heads. The root is slender, running much under ground, and shooting up again in many places; and both leaves and roots are very hot and sharp of taste, like pepper, for which cause it took the name.

PLACE. It groweth naturally in many parts of the kingdom, as at Clare in Essex; also near unto Exeter, Devonshire; upon Rochester Common, Kent; Lancashire, and divers other places; but is usually kept in gardens.

TIME. It flowereth in the end of June, and in July.

GOVERNMENT AND VIRTUES. This herb is under the direction of Mars. Pliny and Paulus Aeginetus say, that pepper-wort is very effectual for the sciatica, or any other gout, pain in the joints, or any other inveterate grief; the leaves to be bruised and mixed with old hog's-lard, and applied to the place, and to continue thereon four hours in men, and two hours in women, the place being afterwards bathed with wine and oil mixed together, and then wrapped with wool or skins after they have sweat a little; it also amendeth the deformities or discolourings of the skin, and helpeth to take away marks, scars, and scabs, or the foul marks of burning with fire or iron. The juice hereof is in some places used to be given in ale to women with child, to procure them a speedy delivery.

#### P E R I W I N K L E. VINCA.

DESCRIPTION. THE common fort hath many branches running upon the ground, shooting out small fibres at the joints as it runneth, taking thereby hold in the ground, and rooteth in divers places; at the joints of these branches stand two small dark-green shining leaves, somewhat like bay-leaves, but smaller, and with them come forth also flowers, one at a joint, standing upon a tender footstalk, being somewhat long and hollow, parted at the brims sometimes into four, sometimes into five, leaves; the most ordinary fort are of a pale blue colour, some are pure white, and some of a dark reddish-purple colour. The root is a little bigger than a rush, brushing in the ground, and creeping with its branches, and is most usually planted under hedges, where it may have room to grow.

PLACE. Those with the pale blue and those with the white flowers grow in woods and orchards by the hedge-sides in divers places of this land, but those with the purple flowers in gardens only.

TIME. They flower in March and April.

GOVERNMENT AND VIRTUES. Venus owns this herb, and saith that the leaves, eaten by man and wife together, cause love between them. The periwinkle is a great binder,

binder, staying bleeding both at mouth and nose, if some of the leaves be chewed; the French use it to stay women's courses. *Dioscorides, Galen, and Aeginetus, commend it against the lask, and fluxes of the belly, to be drunk in wine.*

ST. P E T E R's W O R T. ASCYRUM..

**DESCRIPTION.** IT riseth up with square upright stalks for the most part, somewhat greater and higher than St. John's wort, but brown in the same manner, having two leaves at every joint, somewhat like, but larger than, St. John's wort; and a little rounder pointed, with few or no holes to be seen therein, and having sometimes some smaller leaves rising from the bosom of the greater, and sometimes a little hairy also. At the tops of the stalks stand many star-like flowers, with yellow threads in the middle, very like those of St. John's wort, insomuch that this is hardly to be discerned from it, but only by the largeness and height, the seed being alike in both. The root abideth long, sending forth new shoots every year.

**PLACE.** It groweth in many groves and small low woods, in divers places of this land, as in Kent, Huntingdonshire, Cambridgeshire, and Northamptonshire; as also near water-courses in other places.

**TIME.** It flowereth in June and July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** It is of the same property with St. John's wort, but somewhat weak, and therefore more seldom used. Two drams of the seed taken at a time, in honeyed water, purge choleric humours, as faith *Dioscorides, Pliny, and Galen, and thereby help those that are troubled with the sciatica.* The leaves are used, as St. John's wort, to help those places of the body that have been burnt with fire.

P I M P E R N E L. ANAGALLIS.

**DESCRIPTION.** COMMON pimpernel hath many weak square stalks lying on the ground, beset all along with two small and almost round leaves at every joint one against another, very like chickweed; but hath no footstalks, for the leaves as it were compass the stalk: the flowers stand singly, consisting of five round small pointed leaves of a fine pale red colour, with so many threads in the middle, in whose place succeed smooth round heads, wherein is contained small seed. The root is small and fibrous, perishing every year.

**PLACE.** It groweth every where almost, as well in the meadows and corn-fields as by the way-sides, and in gardens, arising of itself.

No. 20.

4 F

TIME.

TIME. It flowereth from May to August, and the seed ripeneth in the mean time and faileth.

GOVERNMENT AND VIRTUES. It is a solar herb. This is of a cleansing and attractive quality, whereby it draweth forth thorns or splinters, or other such-like things, from the flesh, and, put up into the nostrils, purgeth the head; and Galen faith also, they have a drying faculty, whereby they are good to close the lips of wounds, and to cleanse foul ulcers. The distilled water or juice is much esteemed by the French to cleanse the skin from any roughness, deformity, or discolouring, thereof: being boiled in wine, and given to drink, it is a good remedy against the plague and other pestilential fevers, if the party, after taking it, lie warm in bed and sweat for two hours after, and use the same twice at least. It helpeth also all stings and bitings of venomous beasts or mad dogs, being used inwardly and applied outwardly; it also openeth the obstructions of the liver, and is very available against the infirmities of the reins; it provoketh urine, and helpeth to expel the stone and gravel out of the kidneys and bladder, and helpeth much in all inward wounds and ulcers. The decoction, or distilled water, is no less effectual to be applied to all wounds that are fresh and green, or old filthy fretting and running ulcers, which it very effectually cureth in a short space. A little honey mixed with the juice, and dropped into the eyes, cleanseth them from cloudy mists, or thick filmis which grow over them, and hinder the sight. It helpeth the tooth-ach, being dropped into the ear on the contrary side of the pain. It is also effectual to ease the pains of the hemorrhoids, or piles.

#### G R O U N D - P I N E. TEUCRIUM.

DESCRIPTION. THE common ground-pine groweth low, seldom above a hand's-breadth high, shooting forth divers small branches, set with slender small long narrow greyish or whitish leaves, somewhat hairy, and divided into three parts, many times bushing together at a joint, and sometimes some grow scatteredly upon the stalks, smelling somewhat strong like unto rosin; the flowers are somewhat small, and of a pale yellow colour, growing from the joints of the stalks all along among the leaves, after which come small and round husks: the root is small and woody, perishing every year.

PLACE. It groweth more plentifully in Kent than in any other county of this land; as also in many places from on this side of Dartford, along to Rochester, and upon Chatham-down.

TIME. It flowereth and giveth seed in the summer months.

GOVERNMENT

GOVERNMENT AND VIRTUES. Mars owns this herb. The decoction of ground-pine, drunk, doth wonderfully prevail against the strangury, or any inward pains arising from the diseases of the reins and urine, and is good for all obstructions of the liver and spleen, and gently openeth the body, for which purpose they were wont in former times to make pills with the powder thereof and the purple figs. It helpeth the diseases of the mother, used inwardly or applied outwardly, procuring the courses, and expelling the dead child and after-birth. It acts so powerfully, that it is utterly forbidden for women with child, in that it will cause abortion, or delivery before the time: it is effectual also in all pains and diseases of the joints, as gouts, cramps, palsies, sciatica, and aches; either the decoction of the herb in wine, taken inwardly or applied outwardly, or both, for sometime together; for which purpose the pills, made with the powder of ground-pine, and of hermodactils, with Venice turpentine, are very effectual. These pills also are good for the dropsy, to be continued for some time. The same is a good help for the jaundice, and for griping pains in the joints, belly, or inward parts; it helpeth also all diseases of the brain, proceeding of cold and phlegmatic humours and distillations, as also the falling-sickness. It is an especial remedy for the poison of the aconites of all sorts, and other poisonous herbs, as also against the stinging of any venomous creature. It is a good remedy for a cold cough, especially in the beginning. For all the purposes aforesaid, the herb, being tunned up in new drink and drunk, is almost as effectual, but far more acceptable to weak and dainty stomachs. The distilled water of the herb hath the same effects, but in a smaller degree. The conserve of the flowers doth the like, which Mathiolus much commendeth against the palsey. The green herb, or the decoction thereof, being applied, dissolveth the hardness of women's breasts, and all other hard swellings in any other part of the body. The green herb also, applied, or the juice thereof with some honey, not only cleanseth putrid, stinking, foul, and malignant, ulcers and sores of all sorts, but healeth up the lips of green wounds in any part also.

#### P L A N T A I N. PLANTAGO.

THIS groweth so familiarly in meadows and fields, and by pathways, and is so well known, that it needeth no description.

TIME. It is in its beauty about June, and the seed ripeneth shortly after.

GOVERNMENT AND VIRTUES. It is under the command of Venus, and cures the head by antipathy to Mars, and the privities by sympathy to Venus; neither is there hardly a martial disease but it cures. The juice of plantain, clarified, and drunk for divers days together, either by itself or in other drink, prevaleth wonderfully against

against all torments or excoriations in the bowels, helpeth the distillations of rheum from the head, and stayeth all manner of fluxes, even women's courses when they flow too abundantly. It is good to stay spitting of blood, and other bleeding at the mouth, or the making of foul or bloody water by reason of any ulcer in the reins or bladder; and also stayeth the too free bleeding of wounds. It is held an especial remedy for those that are troubled with the phthisic, or consumption of the lungs, or ulcers in the lungs, or coughs that come of heat. The decoction or powder of the roots or seed is much more binding for all the purposes aforesaid than the leaves. Dioscorides saith, that the root boiled in wine helpeth the tertian and quartan ague. The herb, but especially the seed, is held to be profitable against the dropsy, the falling-sickness, the yellow jaundice, and stoppings of the liver and reins. The roots of plantain and pellitory of Spain beaten to powder, and put into hollow teeth, take away the pains of them: the clarified juice or distilled water dropped into the eyes cooleth the inflammations in them, and taketh away the pin and web; and, dropped into the ears, easeth pains in them, and helpeth and restoreth the hearing: the same also, with juice of house-leek, is profitable against all inflammations and breakings-out of the skin, and against burnings and scaldings by fire or water. The juice or decoction, made either of itself or with other things of like nature, is of much use and effect for old and hollow ulcers that are hard to be cured, and for cancers and sores in the mouth or privy parts; and helpeth also the piles. The juice mixed with oil of roses, and the temples and forehead anointed therewith, easeth the pains of the head proceeding from heat, and helpeth lunatic and phrenetic persons very much: as also the biting of serpents or a mad dog; the same also is profitably applied to all hot gouts in the feet or hands, especially in the beginning. It is also good to be applied where any bone is out of joint, to hinder inflammation, swellings, and pains, that presently rise thereupon. The powder of the dried leaves, taken in drink, killeth worms of the belly, and, boiled in wine, killeth worms that breed in old and foul ulcers. One part of plantain-water, and two parts of the brine of powdered beef, boiled together and clarified, is a most sure remedy to heal all spreading scabs and itch in the head or body, all manner of tetter, ringworms, the shingles, and all other running and fretting sores. Briefly, the plantains are singular good wound-herbs, to heal fresh or old wounds or sores, either inward or outward.

## P L U M S. PRUNUS.

THESE are so well known, that they need no description.

GOVERNMENT AND VIRTUES. All plums are under Venus: those that are sweet moisten the stomach, and make the belly soluble; those that are sour quench thirst

more, and bind the belly ; the moist and waterish sooner corrupt in the stomach, than the firm, which are more nourishing and less offensive. The dried fruit, sold by the grocers under the name of damask prunes, do somewhat loosen the belly, and, being stewed, are often used, both in health and sickness, to procure appetite, and gently open the belly, allay choler, and cool the stomach. The juice of plum-tree leaves, boiled in wine, is good to wash and gargle the mouth and throat, to dry the flux of rheum coming to the palate, gums, or almonds of the ears. The gum of the tree is good to break the stone. The gum, or leaves, boiled in vinegar, and applied, will kill tetterers and ringworms. Mathiolus saith, the oil pressed out of the stones, as oil of almonds is made, is good against the inflamed piles, the tumours or swellings of ulcers, hoarseness of the voice, roughness of the tongue and throat, and likewise pains in the ears. Five ounces of the said oil, taken with one ounce of muscadine, will expel the stone, and help the cholic.

#### POLYPODY OR THE OAK. POLYPODIUM.

**DESCRIPTION.** This is a small herb, consisting of nothing but roots and leaves, bearing neither stalk, flower, nor seed, as it is thought. It has three or four leaves rising from the root, every one singly by itself, of about a hand's length, which are winged, consisting of many small narrow leaves, cut into the middle rib, standing on each side of the stalk, large below, and smaller up to the top, not dented or notched on the edges at all like the male fern ; of a sad green colour, and smooth on the upper side, but on the under side somewhat rough, by reason of some yellowish spots thereon. The root is smaller than one's little finger, lying floping, or creeping along under the upper crust of the earth, brownish on the outside, greenish within, of a sweet harshness in taste, set with certain rough knobs on each side thereof, having also much moss or yellow hair upon it, and some fibres underneath, whereby it is nourished.

**PLACE.** It groweth as well upon old rotten stumps or trunks of trees, as oak, beech, hazel, willow, or any other, as in the woods under them, and upon old mud walls ; also in mossy, stony, and gravelly, places, near unto the woods. That which grows upon oak is accounted the best, but the quantity thereof is scarcely sufficient for common use.

**TIME.** Being always green, it may be gathered for use at any time.

**GOVERNMENT AND VIRTUES.** It is an herb of Saturn. Polypodium of the oak is dearest ; but that which grows upon the ground is best to purge melancholy ; if the humour proceed from other causes, chuse your polypodium accordingly.

Mesue saith, that it drieth up thin humours, digesteth thick and tough, and purgeth burnt, choler, and especially thick and tough phlegm, and thin phlegm also, even from the joints; and is therefore good for those that are troubled with melancholy, or quartan agues, especially if it be taken in whey or honeyed water, in barley water, or the broth of a chicken, with epythium, or with beets and mallows. It is also good for the hardness of the spleen, and for prickings or stitches in the sides, as also for the cholic; some choose to put to it some fennel, aniseed, or ginger, to correct the loathing it causeth in the stomach, which is not at all necessary, it being a safe and gentle medicine, fit for all persons at all seasons, which daily experience confirmeth; and an ounce of it may be given at a time in a decoction, if there be not senna or some other strong purger mixed with it. A dram or two of the powder of the dried roots, taken fasting in a cup of honeyed water, worketh gently, and for the purposes aforesaid. The distilled water, both from the roots and leaves, is much commended for the quartan ague, if taken for several days together; as also against melancholy, or fearful or troublesome sleeps or dreams; and, with some sugar-candy dissolved therein, is good against the cough, shortness of breath, and wheesings, and those distillations of thin rheum upon the lungs which cause phthisics, and oftentimes consumptions. The fresh roots beaten small, or the powder of the dried roots mixed with honey, and applied to any of the limbs out of joint, doth much help them. Applied to the nose, it cureth the disease called polypus, which is a piece of fungous flesh growing therein, which in time stoppeth the passage of breath through that nostril; and it helpeth those clefts or chops that come between the fingers or toes.

### P O P L A R - T R E E. *Populus.*

DESCRIPTION. THERE are two sorts of poplars which are very familiar with us, viz. the white and the black: the white sort groweth large, and tolerably high, covered with a smooth, thick, white, bark, especially the branches, having large leaves cut into several divisions, almost like a vine-leaf, but not of so deep a green on the upper side, and hoary white underneath, of a good scent, the whole representing the form of colt's foot. The catkins, which it bringeth forth before the leaves, are long, of a faint reddish colour, which fall away, and but seldom bear good seed with them. The wood hereof is smooth, soft, and white, and very finely waved, wherefore it is much esteemed.

The black poplar groweth higher and straighter than the white, with a greyish bark, bearing broad and green leaves somewhat like ivy-leaves, not cut in on the edges

like the white, but whole and dented, ending in a point, and not white underneath, hanging by slender long footstalks, which with the air are continually shaken as aspen-leaves are. The catkins hereof are greater than of the white, composed of many round green berries, as it were set together in a long cluster, containing much downy matter, which, on being ripe, is blown away with the wind. The clammy buds hereof, before they are spread into leaves, are gathered to make the *unguentum populeon*, and are of a yellowish-green colour, and small, somewhat sweet, but strong. The wood is smooth, tough, and white, and easy to be cloven. On both these trees groweth a sweet kind of musk, which formerly used to be put into sweet ointments.

**P L A C E.** They grow in moist woods, and by the water-side, in all parts of the kingdom; but the white sort is not so frequently to be met with as the other.

**T I M E.** They are in leaf at the end of summer, but the catkins come before the leaves, as above-mentioned.

**G O V E R N M E N T A N D V I R T U E S.** Saturn hath dominion over both. The white poplar, saith Galen, possesses a cleansing property: one ounce in powder of the bark thereof being drunk, saith Dioscorides, is a remedy for those that are troubled with the sciatica, or the strangury. The juice of the leaves, dropped warm into the ears, easeth the pains thereof. The young clammy buds, or eyes, before they break out into leaves, bruised, and a little honey put to them, are a good medicine for a dull sight. The black poplar is held to be more cooling than the white, and therefore the leaves bruised with vinegar, and applied, help the gout. The seed, drunk in vinegar, is held good against the falling sickness. The water, that dropeth from the hollow places of this tree, taketh away warts, pushes, wheals, and other out-breakings in the body. The young black poplar-buds, saith Mathiolus, are much used by women to beautify their hair, bruising them with fresh butter, and straining them after they have been kept for some time in the sun. The ointment called populeon, which is made of this poplar, is singularly good for all heat and inflammation in any part of the body, and tempereth the heat of wounds. It is much used to dry up the milk in women's breasts, when they have weaned their children.

### P O P P Y. P A P A V E R.

OF these there are three kinds, viz. the white and black of the garden, and the erratic wild poppy, or corn-rose.

**D E S C R I P T I O N.** The white poppy hath at first four or five whitish-green leaves lying upon the ground, which rise with the stalk, compassing it at the bottom of them,

them, and are very large, much cut or torn in on the edges, and dented also. The stalk, which is usually four or five feet high, hath sometimes no branches at the top, and usually but two or three at most, bearing but one head, each wrapped in a thin skin, which boweth down before it be ready to blow, and then rising, and being broken, the flower within it spreadeth itself open, and consisteth of four very large round white leaves, with many whitish round threads in the middle, set about a small round green head, having a crown, or star-like cover, at the head thereof, which, growing ripe, becometh as large as a great apple, wherein are contained a great number of small round seed, in several partitions or divisions next unto the shell, the middle thereof remaining hollow and empty. All the whole plant, leaves, stalks, and heads, while they are fresh, young, and green, yield a milk, when they are broken, of an unpleasant bitter taste, almost ready to provoke puking, and of a strong heady smell, which, being condensed, is called *opium*. The root is white and woody, perishing as soon as it hath given ripe seed.

The black poppy differeth but little from the former, until it beareth its flower, which is somewhat less, and of a black purplish colour, but without any purple spots in the bottom of the leaf. The head of the seed is much less than the former, and openeth itself a little round about the top, under the crown, so that the seed, which is very black, will fall out, if the head is turned downwards.

The wild poppy, or *corn-rose*, hath long and narrow leaves, very much cut in on the edges into many divisions, of a light-green colour, and sometimes hairy withal. The stalk is blackish and hairy also, but not so tall as the garden kinds, having some such-like leaves thereon as grow below, parted into three or four branches sometimes, whereon grow small hairy heads, bowing down before the skin breaks wherein the flower is inclosed, which, when it is full blown, is of a fair yellowish red or crimson colour, and in some much paler, without any spot in the bottom of the leaves, having many black soft spots in the middle, compassing a small green head, which, when it is ripe, is no larger than one's little finger-end, wherein is contained much black seed, smaller by half than that of the garden. The root perisheth every year, and springeth again of its own sowing. Of this kind there is one smaller in all the parts thereof, but differing in nothing else.

**PLACE.** The garden kinds do not naturally grow wild in any place, but are all sown in gardens, where they grow. The wild poppy or *corn-rose* is plentiful enough, and many times too much so, in corn-fields in all parts of the kingdom, as also upon the banks of ditches and by hedge-sides. The smaller wild kind is also to be met with in those places, though not so plentifully as the former.

TIME.

TIME. The garden kinds are usually sown in the spring, which then flower about the end of May, and somewhat earlier if they are of their own sowing. The wild kinds usually flower from May until July, and the seed of them is ripe soon after their flowering.

GOVERNMENT AND VIRTUES. The herb is lunar, and the juice of it is made into opium. The garden-poppy heads, with the seed, made into a syrup, are frequently, and to good effect, used to procure rest and sleep to the sick and weak, and to stay catarrhs and defluxions, or hot thin rheums from the head into the stomach, and upon the lungs, causing a continual cough, the forerunner of a consumption; it helpeth also hoarseness of the throat, and when a person hath lost the power of articulation; for all which complaints the oil of the seed is also a good remedy. The black seed, boiled in wine and drunk, is also said to stay the flux of the belly, and the menes. The empty shells of the poppy-heads are usually boiled in water, and given to procure sleep; the leaves likewise, when so boiled, possess the same virtue. If the head and temples be bathed with the decoction warm, the oil of poppies, the green leaves or heads bruised and applied with a little vinegar, or made into a poultice with barley-meal, or hog's grease, it cooleth and tempereth all inflammations, as also the disease called St. Anthony's fire. It is generally used in treacle and mithridate, and in all other medicines that are used to procure rest and sleep, and to ease pains in the head, as well as in other parts. It is also used to cool inflammations, agues, or phrenes, and to stay defluxions which cause a cough or consumption, and also other fluxes of the belly: it is frequently put into hollow teeth to ease the pain thereof; and hath been found by experience to help gouty pains.

The wild poppy, or corn-rose, Mathiolus saith, is good to prevent the falling-fickness. The syrup made with the flowers is given with good effect to those that have the pleurify; and the dried flowers also, either boiled in water or made into powder and drunk, either in the distilled water of them, or in some other drink, work the like effect. The distilled water of the flowers is held to be of much good use against surfeits, being drunk evening and morning; it is also more cooling than any of the other poppies, and therefore cannot but be as effectual in hot agues, phrenes, and other inflammations, whether external or internal, the syrup or water to be used inwardly, and the green leaves outwardly, either in an ointment or in any other convenient manner in which it can be applied. Galen saith, the seed is dangerous to be used inwardly.

## PURSLAIN. PORTULACA.

GARDEN purlain, being used as a salad-herb, is so well known, that it needs no description.

GOVERNMENT AND VIRTUES. This is an herb of the Moon. It is good to cool any heat in the liver, blood, reins, and stomach, and in hot agues nothing better can be administered; it stayeth hot and choleric fluxes of the belly, the menses, fluor albus, gonorrhea, and running of the reins; also distillations from the head, and pains therein proceeding from heat, want of sleep, or the phrensy. The seed is more effectual than the herb, and is singularly useful in cooling the heat and sharpnes of the urine, lust, venereous dreams, and the like, insomuch that the over-frequent use of it extinguisheth the heat and virtue of natural procreation. The seed, bruised and boiled in wine, and given to children, expelleth worms. The juice of the herb is held equally effectual for all the purposes aforesaid; as also to stay vomitings; taken with some sugar or honey, it helpeth an old dry cough, shortnes of breath, and the phthisic, and stayeth immoderate thirst. The distilled wa-ter of the herb is used by many, being more palatable, with a little sugar, to pro-duce the same effects. The juice also is good in ulcers and inflammations of the secret parts, likewise of the bowels, and hemorrhoids when they are ulcerous, or have excoriations in them. The herb, bruised, and applied to the forehead and temples, allayeth excessive heat therein, hindering rest and sleep; and, applied to the eyes, taketh away the redness and inflammation in them, and those other parts where pushes, wheals, pimples, St. Anthony's fire, and the like, break forth, especially if a little vinegar be put to it; and being applied to the neck, with equal quantities of galls and linseed together, taketh away all pain therefrom, and what is termed the crick in the neck. The juice is also used with oil of roses for the above purposes, for blasts by lightning, and burns by gunpowder, or for women's sore breasts, and to allay heat in all other sores or hurts. Applied also to the navels of children that are too prominent, it reduceth them. It is likewise good for sore mouths and gums that are swelled, as well as to fasten loose teeth. Camerarius saith, that the distilled water cured the tooth-ach when all other remedies failed; and that the thickened juice, made into pills with the powders of gum tragacanth and arabic, being taken, greatly relieveth those that make bloody water. Applied to the gout, it easeth pains thereof, and helpeth hardness of the sinews, if not arising from the cramp or a cold cause. This herb, if placed under the tongue, assuageth thirst.

PRIMROSES.

## PRIMROSES. PRIMULA.

THESE are so well known, that they need no description. Of the leaves of primroses is made an excellent salve to heal green wounds.

## PRIVATE. LIGUSTRUM.

DESCRIPTION. THE common privet runs up with many slender branches to a tolerable height and breadth, and is frequently used in forming arbours, bowers, and banqueting-houses, and shaped sometimes into the forms of men, horses, birds, &c. which, though at first requiring support, grow afterwards strong enough of themselves. It beareth long and narrow green leaves by couples, and sweet-smelling white flowers in tufts at the ends of the branches, which turn into small black berries that have purplish juice within them, and some seeds that are flat on the one side, with a hole or dent therein.

PLACE. It groweth in divers woods in Great Britain.

TIME. The privet flowereth in June and July, and the berries are ripe in August and September.

GOVERNMENT AND VIRTUES. It is under the influence of the Moon, and is but little used in physic in these times, except in lotions to wash sores and sore mouths, and to cool inflammations and dry up fluxes; yet Mathiolus saith, it serveth every purpose for which the cypres-tree, or oriental privet, is approved of by Dioscorides and Galen. He further saith, that the oil extracted from the flowers of privet by infusion, and set in the sun, is very serviceable in inflammatory wounds, and for the head-ach when arising from a hot cause. There is a sweet water also distilled from the flowers, which is good for all those diseases that require cooling and drying, and therefore helpeth all fluxes of the belly or stomach, bloody fluxes, and women's courses, being either drunk or otherwise applied; as also for those that void blood at their mouth or at any other place; likewise for distillations of rheums in the eyes, especially if it be used with tutty.

## POME C I T R O N - T R E E. CITRUS MEDICA.

THERE are three kinds of pomecitrons. The tree is generally called *malus medica*, or *citrus medica*.

DESCRIPTION. 1. The great pomeciton-tree, or *malus citria major*. This tree doth not grow very high in some places, but rather with a short crooked body, and

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in others not much lower than the lemon-tree, spreading out into sundry great long arms and branches; set with long and sharp thorns, and fair, large, and broad, fresh-green leaves, a little dented about the edges, with a shew of almost invisible holes in them, but less than the orange-leaves have; of a sweet scent; the flowers green at the leaves, all along the branches, being somewhat longer than those of the orange; made of five thick, whitish, purple, or bluish, leaves, with some threads in the middle, after which followeth fruit all the year, being seldom seen without ripe fruit, and half-ripe, and some young and green, and blossoms, all at once. This kind beareth great and large fruit, some the size of a musk-melon, others less, but all of them with a rugged, bunched-out, and uneven, yellow bark, thicker than in any of the other sorts, with a sour juice in the middle, and somewhat great, pale, whitish, or yellow, seed, with a bitter kernel lying in it; the smell of this fruit is very strong and comfortable to the fenses.

2. The smaller pomecitron tree, *citria malus minor, five limonera*; this tree groweth very like the former, but the leaves are somewhat smaller and shorter, and so are the thorns: the flowers are of a deep bluish colour, and the fruit less and longer than they, but no longer than the small fruit of the former; the rind is also thick and yellow, but not so rugged, having more sour juice and fewer seed.

3. *Citria malus, five limonera pregnans*. This differs very little from the foregoing.

PLACE AND TIME. All these sorts of citrons are cultivated in Spain by the curious, but were transported thither from sundry places abroad. The great pomecitron was brought first from Media and Persia, and was therefore called *Malum Medicum* and *Malum Persicum*. The last was brought from the Fortunate Islands. They are continually in flower, and bear fruit throughout the year.

GOVERNMENT AND VIRTUES. These are solar plants; yet they are of different qualities; all the parts of the fruit hereof, both the outer and inner rind, as well as the juice and seed, are of excellent use, though of contrary effects one to another; some being hot and dry, whilst others are cold and dry; the outer yellow rind is very sweet in smell, highly aromatic, and bitter in taste; and, dried, is a sovereign cordial for the heart, and an excellent antidote against venom and poison in cases of the plague or any other infection; it warmeth and comforteth a cold and windy stomach, and disperseth cold, raw, and undigested, humours therein, or in the bowels, and mightily expelleth wind. Being chewed in the mouth, it helpeth a stinking breath; it also helps digestion, and is good against melancholy. The outer rinds are often used in cordial electuaries, and preservatives against infection and melancholy. It also helpeth to loosen the body, and therefore there is a solutive electuary made

made therewith, called *electuarium de citrio solutivum*, to evacuate the bodies of cold phlegmatic constitutions, and may safely be used where choler is mixed with phlegm. The inner white rind of this fruit is rather unsavoury, almost without taste, and is not used in physic. The four juice in the middle is cold, and far surpasseth that of lemons in its effects, although not so sharp in taste. It is singularly good in all pestilential and burning fevers, to restrain the venom and infection, to suppress the choler and hot distemper of the blood, and to quench thirst; and correcteth the bad disposition of the liver. It stirs up an appetite, and refreshes the over-spent and fainting spirits; resisteth drunkenness, and helpeth giddiness of the head, by the hot vapours arising therein, which causeth a phrenzy for want of sleep. The seed not only equalleth the rind in its virtues, but in many instances surpasseth it.

### P E P P E R. P I P E R.

**KINDS AND NAMES.** THERE are several sorts of pepper, as black, white, and long, pepper; called *piper nigrum, album, et longum*. The black, and white, pepper, differ not either in manner of growing, or in form of leaf or fruit. The long pepper also grows in the same manner, but differeth in the fruit. All these sorts grow on a climbing bush, in the East-Indies, after one manner, that is, as hops grow with us; so that, if they be not sustained by some tree or pole, on which they may climb and spread, they will lie down on the ground, and thereon run and shoot forth small fibres at every joint: but the usual manner is to plant a branch taken from the bush near some tall tree, great cane, or pole; and so it will quickly, by winding itself about such props, get to the top thereof. It is full of joints, and shooteth forth fair large leaves, one at each joint, being almost round, but ending in a point, green above and paler underneath, with a great middle-rib, and four other ribs, somewhat less, spreading from it, two on each side, and smaller therein also, unto the edges, which are smooth and plain, somewhat thin, and set on a pretty long footstalk. The fruit, or pepper, whether black, white, or long, groweth at the same joint, but on the contrary side, opposite to the leaf, round about a long stalk, somewhat thinly set all along thereon, or not so close as a bunch of grapes; the root hath sundry joints creeping in the ground, with fibres at the joints. The white pepper is hardly distinguishable from the black, by the plants thereof, until it become ripe, (for the white and black pepper grow on different bushes,) but that the leaves are of a little paler green colour, and the grains or berries are white, solid, firm, without wrinkles, and more aromatic. The long pepper hath leaves of very near the same form and size, but a little longer pointed, of a paler

green colour, thinner also, and with a shorter footstalk, but four or five ribs sometimes on each side, according to the largeness of the leaf, with other smaller veins therein, and has less acrimony and hot taste than the black. The fruit of this also groweth in like manner at the joints, opposite to each leaf, which are closer set together than in the black, consisting of many small grains as it were set together in rows, and not open and separate as in the black and white pepper; of an ash-colour when it is ripe.

**GOVERNMENT AND VIRTUES.** All the peppers are under the dominion of Mars, and of temperature hot and dry almost in the fourth degrec; but the white pepper is the hottest; which sort is much used by the Indians, many of whom use the leaves as Europeans do tobacco; and even the pepper itself they also chew, taking from the branch one grain after another; while they are fresh.

Pepper is much used with us in meats and sauces; comforteth and warmeth a cold stomach, consumeth crude and moist humours therein, and stirreth up the appetite. It helpeth to break or dissolve wind in the stomach or bowels, to provoke urine, to help the cough and other diseases of the breast, and is effectual against the bitings of serpents, and other poisons, and to that purpose it is an ingredient in the great antidotes; but the white pepper, as being more sharp and aromatical, is of more effect in medicine; and so is the long, being more used to be given for agues to warm the stomach before the coming of the fit, thereby to abate the shaking thereof. All of them are used against the quinsy, being mixed with honey, and taken inwardly and applied outwardly; and disperse the kernels, as well in the throat as in any other part of the body.

Mathiolus maketh mention of a kind of pepper, which he calleth *piper Æthiopicum*, brought with other merchandise from Alexandria into Italy, and growing in long cods like beans or pease; but many cods set together at a place, whose grains within them being like pepper both in form and taste, but smaller, stick very close to the inside; this sort Serapio calleth *granum zelin*.

Monardus also maketh mention of a kind of long pepper, that groweth in all the tract of the continent in the West-Indies. This kind of pepper is half a foot long, and of the thickness of a small rope, consisting of many rows of small grains, set close together as in the head of plantain, and is black when ripe; and hotter in taste, and more aromatical and pleasant, than capsicum, and preferred before black pepper, and groweth (says he) on high trees or plants.

## GUINEA-PEPPER. CAPSICUM.

KINDS AND NAMES. THERE are many sorts thereof found out and brought to our knowledge in these latter days. Gregorius de Reggio, a Capuchin friar, maketh mention of a dozen several sorts of varieties, at the least, in the fruit or pods, though in any thing else very little differing: there are likewise some other varieties, observed by Clusius and others.

DESCRIPTION. The most ordinary Guinea-pepper with long husks, *capsicum majus vulgatus oblongis siliquis*. By this you may frame the description of all the rest, the main difference consisting in the form of the fruit, whether husk or pods. This plant riseth up with an upright, firm, round, stalk, with a certain pith within it; growing about two feet high in this country, and not exceeding three feet in any other hotter climate, spreading into many branches on all sides; even from the very bottom, which divide themselves again into other smaller branches, at each joint whereof come two long leaves upon short footstalks, somewhat bigger than those of nightshade, with divers veins in them, not dented about the edges at all, and of a dark-green colour; the flowers stand severally at the joints, with leaves like the flowers of nightshade, consisting most usually of five, and sometimes six, white small pointed leaves, standing open like a star; with a few yellow threads in the middle; after which come the fruit, either great or small, long or short, round or square, as the kind is, either standing upright or hanging down; as their flowers show themselves either of this or that form; in this, about three inches in length, thick and round at the stalk, and smaller towards the end, which is not sharp, but round-pointed, green at the first, but when full ripe of a very deep shining crimson colour; on the outside of which is a thick skin, and white on the inside, of a sweet pleasant smell, having many flat yellow seeds therein, cleaving to certain thin skins within it, which are broad at the upper end and narrow at the lower, leaving the end or point empty within, not reaching so far; the husk or seed of which is of so hot and fiery a taste, as to inflame and burn the mouth and throat for a long time after it is chewed, and almost ready to choak one that taketh much at a time thereof: the root is composed of a great tuft or bush of threads, which spreads plentifully on the ground, and perisheth even in hot countries after it hath ripened all its fruit.

There are nineteen other sorts of Guinea-pepper, all which, except the under-mentioned, differ so little from that already described, as not to be worth explanation.

Guinea-pepper with hairy stalks, *Capiscum caule piloso*. This groweth with green round stalks, set full of white hairs, contrary to all other sorts; at the branches

branches come forth two such leaves as the before-mentioned one hath, but rather larger; the flowers are white, consisting of five leaves like the rest, which are likewise larger; after which come the cods, green at first, and, when ripe, red like the rest, which are somewhat great and long, ending in a very long point; not differing from the former sorts in the seed and roots.

**PLACE AND TIME.** All these sorts of pepper came from the West Indies, called America, and the several parts thereof, Brasil being reckoned as a part of it, and our Summer Islands also; but here in England (though erroneously) we give it the name of Guinea-pepper, as though it originally came from thence. They are now raised in gardens in all the provinces of Europe, excepting in very cold countries, and grow in many places of Italy, Spain, &c.

They do not sow them in hot countries before the end of March or beginning of April, and at the soonest they do not flower before August following, and their red cods ripen not thoroughly until November, when they will continue both with flower and fruit most of the winter, where the weather is not very intense; but in very cold climates they perish with the first frost, and therefore must be carefully housed, if any will preserve them.

**GOVERNMENT AND VIRTUES.** All these sorts of pepper are under Mars, and are of a fiery, hot, and sharp, biting taste, and of temperature hot and dry to the end of the fourth degree; they burn and inflame the mouth and throat so extremely, that it is hard to be endured; and if it be outwardly applied to the skin in any part of the body, it will exulcerate and raise it as if it had been burnt with fire or scalded with hot water. The vapours that arise from the husks or cods, while one doth but open them to take out the seed, (especially if they beat them into powder, or bruise them,) will so pierce the brain, by flying up into the head through the nostrils, as to produce violent sneezings, and draw down abundance of thin rheum, forcing tears from the eyes, and will all pass into the throat, and provoke a sharp coughing, and cause violent vomiting; and, if any shall with their hands touch their face or eyes, it will cause so great an inflammation, that it will not be remedied in a long time, by all the bathing thereof with wine or cold water that can be used, but yet will pass away without further harm. If any of it be cast into fire, it raiseth grievous strong noisome vapours, occasioneth sneezing, coughing, and strong vomiting, to all that be near it; if it should be taken simply of itself (though in a very small quantity, either in powder or decoction,) it would be hard to endure, and might prove dangerous to life.

Having now given you an account of the dangers attending the immoderate use of these violent plants and fruits, I shall next direct you how to proceed in order to

make them become serviceable for health, being corrected and cleansed from all their evil and noisome qualities.

*Preparations of Guinea-Pepper.*

Take the ripe cods of any sort of the Guinea-pepper, (for they are in property all alike,) and dry them well, first of themselves, and then in an oven after the bread is taken out: put it into a pot or pipkin, with some flour, that they may be quite dried; then cleanse them from the flour, and their stalks, if they have any; cut both husks and seeds within them very small, and to every ounce of them put a pound of wheat-flour; make them up together into cakes or small loaves, with leaven proportioned to the quantity you make; bake these as you do bread of the small size, and, when baked, cut it again into smaller parts, and then bake it again, that it may be as dry and hard as a biscuit, which, beaten into fine powder, and sifted, may be kept for any of the uses hereafter-mentioned, or may serve instead of ordinary pepper to season meat or broth; for sauce, or any other purpose the East-India pepper doth serve; for it doth not only give good taste or relish to the meat or sauce, but is found to be very good both to discuss the wind and the cholick in the body: it is of singular service to be used with flatulent or windy diet, and such as breeds moisture and crudities; one scruple of the said powder, taken in a little broth of veal, or of a chicken, gives great relief and comfort to a cold stomach, causing phlegm and such viscous humours as lie in the bottom thereof to be voided; it helpeth digestion, for it occasioneth an appetite to meat, provoketh urine, and, taken with saxifrage-water, expelleth the stone in the kidneys, and the phlegm that breedeth them; and taketh away dimness or mistiness of the sight, being used in meats; taken with *pillulæ aleophanginæ*, it helpeth the dropsy; the powder, taken for three days together in the decoction of pennyroyal, expelleth the dead birth; but, if a piece of the cod or husk, either green or dry, be put into the womb after delivery, it will make them barren for ever after; but the powder, taken for four or five days fasting, with a little fennel-feed, will ease all pains of the mother. The same also made up with a little powder of gentian and oil of bays into a pessary, with some cotton-wool, doth bring down the courses; and, mixed with a lochoch or electuary, helpeth an old inveterate cough; being mixed with honey and applied to the throat, it helpeth the quinsy; and made up with a little pitch or turpentine, and laid upon any hard knots or kernels in any part of the body, it will dissolve them, and not suffer any more to grow there; and, being mixed with nitre and applied, it takes away the morphew, and all freckles, spots, marks, and discolourings, of the skin; applied with hen's grease, it dissolves all

cold imposthumes and carbuncles; and, mixed with sharp vinegar, it dissolves the hardness of the spleen; mixed with *ungentum de alabastro*, and the reins of the back anointed therewith, it will take away the shaking-fits of agues; a plaster made thereof, with the leaves of tobacco, will heal the stinging or biting of any venomous beasts.

The decoction of the husks themselves, made with water, and the mouth gargled therewith, helpeth the tooth-ach, and preserveth the teeth from rottenness; the ashes of them, being rubbed on the teeth, will cleanse them, and make them look white. The decoction of them in wine helpeth the *hernia ventosa*, or watery rupture, if applied in the morning and evening: if put to steep for three days together in aqua vitae, it helpeth the palsy, the place affected being bathed therewith; and, steeped for a day in wine, and two spoonfuls drunk thereof every day fasting, it is of singular service in rendering stinking breath sweet.

#### P I T C H - T R E E. PINUS.

**NAMES.** THIS tree is called in Latin *picea* and *pitis*.

**DESCRIPTION.** The pitch-tree is of an indifferent bigness, and tall stature, but not so great as the pine-tree, and always green, like the pine and fir-tree. The timber is fat, and doth yield an abundance of rosin of divers sorts; the branches are hard, and parted into other sprays, most commonly cross-wise, upon which grow small green leaves, not round about the branches, but by every side, one right over against another, like little feathers; the fruit is smaller than the fruit of the pine-tree. In burning of this tree, there doth issue out pitch, as doth also out of the pine-tree.

**PLACE AND TIME.** The pitch-tree grows in many places of Greece, Italy, France, and Germany; and the fruit thereof is ripe in September.

**GOVERNMENT AND VIRTUES.** The leaves, bark, fruit, kernels, or nuts, of this tree, are almost of the same nature, virtues, and operations, as the leaves, bark, fruit, and kernels, of the pine-tree.

#### *The Rosin that cometh out of the Pine or Pitch-Trees.*

Out of the pine and pitch-trees come three sorts of rosin, besides the pitch and tar.

1. The one floweth out by force of the heat of the sun in summer, from the wood or timber where it is broken or cut.
2. The other is found both upon and between the bark of the pine and pitch-tree, and most commonly in such parts thereof as are cut or any other way impaired.
3. The third kind groweth betwixt the scales of the fruit.

**NAMES.**

**NAMES.** All the kinds of rosin are called in Latin *resina*, in French *resine*, and in Dutch *herst*. The first kind is called *resina liquida*, and *resina pini*; of this sort is also the rosin which is molten by the sun in summer, and remaineth dry, and may be made into powder, which some called *resina arida*, or dry rosin.

The second kind is called in Latin *resina arida*; that which sweateth out of the pine-tree is called *resina pinea*, and that which cometh out of the pitch-tree *resina picea*. The third kind is called *resina sibobilina*.

**GOVERNMENT AND VIRTUES.** All the rosins are solar, of an hot and dry temperature, and of a scouring and cleansing nature. Rosin doth cleanse and heal fresh wounds, and therefore is a principal ingredient in all ointments and plasters that serve for that purpose. It softeneth hard swellings, and is comfortable to bruised parts or members, being applied, or laid to, with oils, ointments, or plasters, appropriated to that use.

#### PITCH AND TAR. PINUS.

**KINDS AND NAMES.** THERE are two sorts of pitch: the one moist, called liquid pitch; the other is hard and dry: they do both run out of the pine and pitch tree, and out of certain other trees, as the cedar, turpentine, and larch, trees, by burning of the wood and timber of them. Pitch is called in Latin *pix*, in French *poix*, in Dutch *peck*. The liquid pitch is called in Latin *pix liquida*, in Brabant *teer*, and in English *tar*. The dry pitch is called in Latin *pix arida*, and *navalis*; in English, *ship-pitch* or *stone-pitch*; in Dutch *steen-peck*.

**GOVERNMENT AND VIRTUES.** The pitch and tar are both solar, hot and dry in the second degree, and of subtle parts, but the stone-pitch is the driest; the liquid pitch or tar is the hottest, and of more subtle parts. Liquid-pitch, taken with honey, doth cleanse the breast, and is good to be licked in by those that are troubled with shortness of breath, whose inside is clogged with corrupt matter. It mollifieth and bringeth to perfection all hard swellings, and is good to anoint the neck against the squinancy or swelling of the throat; it is good to be put into mollifying plasters, anodynes to take away pains, and maturative or ripening medicines; being applied with barley-meal, it softeneth the hardness of the matrix and fundament; liquid pitch mingled with *sulphur vivum*, or quick brimstone, represseth fretting ulcers, foul scabs, and scurf; and, if some salt be put thereto, it is good to be laid upon the wounds occasioned by the bite or sting of any serpent or viper. It cureth the rifts and cloven chaps that happen to the hands, feet, &c.

The stone-pitch, being pounded very small, with the fine powder of frankincense, healeth hollow ulcers and fistulas, filling them up with flesh: the stone-pitch

pitch is not so strong as the liquid pitch, but is much better, it being more apt to close up the lips of wounds.

### POMEGRANATE-TREE. PUNICA.

**KINDS AND NAMES.** THE pomegranate-tree is distinguished into three kinds; that is, the manured pomegranate bearing fruit, and the greater and less wild kind. The first is called *malus punicum* and *malus granata*, and the fruit *malum punicum* and *malum granatum*, because it is supposed that they were brought over, from that part of Africa where old Carthage stood, into that part of Spain which is now called Granada, and thence called *granatum*. The flowers of the manured kind (as Dioscorides saith) are called *citin*; but Pliny calleth the flowers of the wild kind *citinus*, and the flowers of both kinds *balauſtium*; but *citinus* is more properly the cup wherein stand the flowers of both kinds; *balauſtium* is with us generally taken for the double flowers of the wild kind.

**DESCRIPTION.** The pomegranate-tree bearing fruit, *malus punica sativa*. The tree groweth not great in the warm countries, and where it is natural; not above seven or eight feet high, spreading into many slender branches, here and there set with thorns, and with many very fair, green, shining, leaves, like the leaves of large myrtle, every one upon a small and reddish footstalk. Among the leaves come forth here and there the flowers, which are like bell-flowers, broad at the brims, and smaller at the bottom, being one whole leaf divided at the top into five parts, of an orient crimson colour naturally, but much paler with us, and many veins running through it, with divers threads in the middle, and standing in a brownish hollow cup, or long hard husk; the fruit is great and round, with a hard, smooth, brownish-red, rind; not very thick, but yellowish on the inside, and a crown at the top, stored plentifully with a fine clear liquor or juice, like wine, full of seeds incloſed in skins, and the liquor among them. Sometimes this breaketh the rind as it groweth, which will cause it to rot very soon.

**PLACE AND TIME.** The manured kinds grow in Spain, Italy, Portugal, and other warm countries; but here in England they are preserved and housed with great care, (yet come not to perfection,) and the wild kind with much more; they seldom flower with us.

**GOVERNMENT AND VIRTUES.** The Sun governs these plants and fruits. Pomegranates are hot and moist, but yet moderate; all the sorts breed good blood, yet do they yield but slender nourishment; they are very helpful to the stomach: thofe that are sweet are most pleasant, yet they somewhat heat, and breed wind and choler,

and therefore they are forbidden in agues; and those that are four are fit for a hot fainting stomach, stay vomiting, and provoke urine, but are somewhat offensive to the teeth and gums in the eating. The seed within the fruit, and the rind thereof, do bind very forcibly, whether the powder or the decoction be taken, and stay casting, the bloody flux, women's courses, the spitting of blood, and running of the reins, and are said to be good for the dropfy; the flowers work the same effects. The fruit is good against the bite of the scorpion, and stayeth the immoderate longings of women with child; the decoction of the rind or seeds of the fruit, with a little syrup put to it, is good against the cankers in the mouth and ulcers in any part of the body, and against ruptures; it also helpeth ulcers in the ears or nose, or rheums in the eyes, being dropped or injected; it fasteneth loose teeth, destroyeth the flat worms in the body, and helpeth to take away wens. With the rinds of pomegranates, instead of galls, or with galls, is made the best writing-ink, both for blackness and durability.

#### QUEEN OF THE MEADOWS, OR MEADOW-SWEET. SPIRÆZ.

**DESCRIPTION.** THE stalks of this are reddish, rising to be three feet high, sometimes four or five feet, having at the joints thereof large winged leaves set on each side of a middle rib, being hard, rough, or rugged, crumpled like elm-leaves, having also some smaller leaves with them, (as agrimony hath,) somewhat deeply dented about the edges, of a fair green colour on the upper side, and greyish underneath, of a pretty sharp scent and taste, somewhat like unto burnet; and a leaf thereof, put into a cup of claret, giveth it a fine relish: at the top of the stalks and branches stand many tufts of small white leaves thick together, which smell much sweeter than the leaves; and in their places, being fallen, come crooked and cornered seed. The root is somewhat woody, blackish on the outside, and brownish within, with divers greater strings and smaller fibres set thereat, of a strong scent, but not so pleasant as the flowers and leaves; it abideth many years, and shooteth forth anew every spring.

**PLACE.** It grows in moist meadows, or near the courses of water.

**TIME.** It flowereth in some place or other all the three summer months, viz. June, July, and August; and the seed is ripe quickly after.

**GOVERNMENT AND VIRTUES.** Venus claims dominion over this herb. It is used to stay all manner of bleedings, fluxes, vomitings, and women's courses, as also their whites; it is said to take away the fits of quartan agues, and to make a merry heart, for which purpose some use the flowers, and some the leaves. It

speedily helpeth those that are troubled with the cholic, being boiled in wine; and, with a little honey, taken warm, it openeth the belly: but, boiled in red wine, and drunk, it stayeth the flux of the belly. Being outwardly applied, it healeth old ulcers that are cancerous or eaten, or hollow and fistulous, for which it is by many much commended, as also for sores in the mouth or secret parts. The leaves, when they are full grown, being laid upon the skin, will, in a short time, raise blisters thereon. The water thereof helpeth the heat and inflammation of the eyes.

### Q U I N C E - T R E E. PYRUS.

**D E S C R I P T I O N.** THE ordinary quince-tree growtheth often to the height and bigness of an apple-tree, but more usually lower, and crooked, with a rough bark, and branches spreading far abroad. The leaves are somewhat like those of the apple-tree, but thicker, broader, and fuller of veins, and whiter on the under-side, not dented at all about the edges. The flowers are large and white, sometimes dashed over with a blush. The fruit, when ripe, is yellow, and covered with a white frieze or cotton, thick set on the younger, and growing less as they become thoroughly ripe, bunched out oftentimes in some places, some being like an apple, and some a pear, of a strong heady scent, not durable to keep, and of a sour, harsh, and unpleasant, taste, to eat fresh; but, being scalded, roasted, baked, or preserved, it becomes more pleasant.

**P L A C E A N D T I M E.** It thrives and grows best near the water-side, and is common throughout Great Britain; it flowereth not until the leaves come forth. The fruit is ripe in September or October.

**G O V E R N M E N T A N D V I R T U E S.** Old Saturn owns the tree. Quinces, when they are green, help all sorts of fluxes in man or woman, and choleric lasks, castings, and whatsoever needeth astriction, more than any way prepared by fire; yet the syrup of the juice, or the conserve, is rather opening, much of the binding quality being consumed by the fire; and, if a little vinegar be added, it stirreth up the languishing appetite, and strengtheneth the stomach; some splices being added, it comforteth and cheereth the decayed and fainting spirits, helpeth the liver when oppressed so that it cannot perfect the digestion, and correcteth choler and phlegm. If you would have them purging, put honey to them instead of sugar; and, if more laxative, for choler, rhubarb; for phlegm, turbith; for watery humours, scammony: but, if more forcibly to bind, use the unripe quinces, with roses, acacia, or hypocistis, and some torrefied rhubarb. To take the crude juice of quinces is held a preservative against the force of deadly poison; for it hath been found most true, that the very smell of a quince hath taken away all

the

the strength of the poison of white hellebore. If there be need of any outward binding and cooling of any hot fluxes, the oil of quinces, or any medicine that they make thereof, is very available to anoint the belly or other parts. It likewise strengtheneth the stomach and belly, and the sinews that are loosened by sharp humours falling on them, and restraineth immoderate sweating. The mucilage, taken from the seeds of quinces, and boiled in a little water, is very good to cool the heat, and heal the sore breasts of women. The same with a little sugar is good to lenify the harshness and foreness of the throat and roughness of the tongue. The cotton or down of quinces, boiled, and applied to plague-fores, healeth them up; and laid as a plaster, made up with wax, it bringeth hair to them that are bald, and keepeth it from falling off.

### Q U I C K - G R A S S . C R A T E G U S .

**KINDS AND NAMES.** THERE are several sorts of these grases, some growing in the fields and other places of the upland ground, and others near the sea: it is also called dog-gras, or *gramen caninum*; the other several names shall follow in the descriptions.

**DESCRIPTION.** 1. Common quick-gras, *gramen caninum vulgare*. This gras creepeth far about under ground, with long white jointed roots, and small fibres almost at every joint, very sweet in taste, as the rest of the herb is, and interlacing one another; from whence shoot forth many fair and long grasse-leaves, finall at the ends, and cutting or sharp on the edges; the stalks are jointed like corn, with the like leaves on them, and a long spiked head, with long husks on them, and hard rough feed in them.

2. Quick-gras with a more spreading panicle, *gramen caninum longius radiatum et paniculatum*. This differeth very little from the former, but in the tuft, or panicle, which is more spread into branches, with shorter and broader husks; and in the root, which is fuller, greater, and farther spread.

3. The smaller quick-gras with a sparsed tuft, *gramen caninum latiore panicula minus*. This small quick-gras hath slender stalks; about half a foot high, with many very narrow leaves, both below and on the stalks; the tuft, or panicle, at the top, is small according to the plant, and spreadeth into sundry parts, or branches: the root is small and jointed, but creepeth not so much, and has many more fibres than the others have, and is a little browner, but more sweet.

4. Low-bending quick-gras, *gramen caninum arvense*. This creepeth much under ground, but in a different manner, the stalk taking root in divers places, and scarcely rising a foot high; with such-like green leaves as the ordinary, but shorter; the spiked head is bright, and spreadeth abroad somewhat like the field-gras.

5. *Gramen caninum sapinum monspeliense.* This differeth very little from the last, in any other part thereof than in the panicle, or spiked head: which is longer, and not spread or branched into parts as that is.

6. A small sweet grass like quick-grass, *gramen exile tenuisolum, canariae simile, sive gramen dulce.* This small grass hath many low creeping branches, rooting at the joints, like the two last, having a number of small and narrow leaves on them, much less than they; and a small sparfed panicle, somewhat like the red dwarf-grass.

7. Wall-grass with a creeping root, *gramen murorum radice repente.* This wall-grass, from a blackish creeping root, springeth forth with many stalks a foot high, bending or crooking with a few narrow short leaves on them, at whose tops stand small white panicles, of an inch and a half long, made of many small chaffy husks.

**PLACE AND TIME.** The first is usual and common in divers ploughed grounds and gardens, where it is often more bold than welcome, troubling the husbandmen as much, after the ploughing up of some of them, (as to pull up the rest after the springing, and, being raked together, to burn them,) as it doth the gardeners, where it happeneth, to weed it out from amongst their trees and herbs; the second and third are more scarce, and delight in sandy and chalky grounds; the three next are likewise found in fields that have been ploughed and do lie fallow; and the last is often found on old decayed walls in divers places; they flourish in the beginning of summer.

**GOVERNMENT AND VIRTUES.** These are plants of Mercury. The root is of temperature cold and dry, and hath a little mordacity in it, and some tenuity of parts; the herb is cold in the first degree, and moderate in moisture and dryness; but the seed is much more cold and drying. This quick-grass is the most medicinal of all sorts of grasses: it is effectual to open obstructions of the liver and spleen, and the stoppings of urine, the decoction thereof being drunk, and to ease the gripping pains in the belly, and inflammations; and to waste the excrementitious matter of the stone in the bladder, and the ulcers thereof; also the root, being bruised and applied, doth knit together and consolidate wounds: the seed doth most powerfully expel urine, bindeth the belly, and stayeth vomiting; the distilled water is good to be given to children for the worms.

### RADISH; RAPHANUS. HORSE-RADISH; COCHLEARIA.

THE garden-radish is so well known, that it needeth no description.

**DESCRIPTION.** The horse-radish hath its first leaves rising before winter, about a foot and a half long, very much cut in or torn on the edges into many parts, of a dark

dark green colour, with a great rib in the middle ; after those have been up a while, others follow, greater, rougher, broader, and longer, whole, and not divided as the first, but only somewhat roundly dented about the edges. The stalk, when it beareth flowers, (which is but seldom,) is great, rising up with some few smaller leaves thereon to three or four feet high, spreading at the top many small branches of white flowers, of four leaves each ; after which come small pods, like those of shepherds purse, but seldom with any seed in them. The root is large, long, white, and rugged, shooting up divers heads of leaves ; but it doth not creep within ground, nor run above ground, and is of a strong, sharp, and bitter, taste, almost like mustard.

**PLACE.** It is found wild in some places in England, but is chiefly planted in gardens, where it thrives in moist and shadowy places.

**TIME.** It flowereth but seldom ; but, when it doth, it is in July.

**GOVERNMENT AND VIRTUES.** They are both under Mars. The juice of horse-radish, given to drink, is held to be very effectual for the scurvy. It killeth the worms in children, being drunk, and also laid upon the belly. The root bruised, and laid to the place grieved with sciatica, joint-ach, or the hard swellings of the liver and spleen, doth wonderfully help them all. The distilled water of the herb and roots is more commonly taken with a little sugar for all the purposes aforesaid.

Garden radishes are eaten as fallad, but they breed humours in the stomach, and corrupt the blood ; yet, for such as are troubled with the gravel, stone, or stoppage of urine, they are good physic, if the body be strong that takes them ; the juice of the roots may be made into a syrup for that use ; they purge by urine exceedingly.

Sleep not presently after the eating of radish, for that will cause a stinking breath.

#### R A G W O R T. SENE<sup>C</sup>IO.

IT is called St. James-wort, stagger-wort, stammer-wort, and seggrum.

**DESCRIPTION.** The greater common ragwort hath many large and long dark-green leaves lying on the ground, very much rent and torn on the sides into many pieces ; from among which rise up sometimes one and sometimes two or three square or crested blackish stalks three or four feet high, sometimes branched, bearing divers such-like leaves upon them at several distances unto the tops, where it brancheth forth into many stalks bearing yellow flowers, consisting of a number of leaves set as a pale or border, with a dark yellow thrum in the middle, which at last turn into down, and, with the small blackish grey seed, are carried away with the wind. The root is made of many fibres, whereby it is firmly fastened into the ground, and abideth many years.

There is another sort hereof different from the former only in this, that it riseth not so high; the leaves are not so finely jagged, nor of so dark a green colour, but rather whitish, soft, and woolly, and the flowers usually paler.

PLACE. They both grow wild in pastures and untilled grounds in many places, and oftentimes both of them in one field.

TIME. They flower in June and July, and the seed is ripe in August.

GOVERNMENT AND VIRTUES. Ragwort is under the command of Venus, and cleanseth, digesteth, and discusseth. The decoction of this herb is good for ulcers in the mouth or throat, and for swelling, hardnes, or imposthumations, for it thoroughly cleanseth and healeth them; as also the quinify and the king's evil. It helpeth to stay catarrhs, thin rheum, and defluxions from the head into the eyes, nose, or lungs. The juice is found by experience to be good to heal green wounds, and to cleanse and heal old and filthy ulcers; as also inward wounds and ulcers, and stayeth the malignity of fretting and running cancers, and hollow fistulas, not suffering them to spread further. It is also much commended to help aches and pains, either in the fleshy parts, or in the nerves and sinews; as also the sciatica, or pain of the hips. Bathe the places with the decoction of the herb, or anoint them with an ointment made of the herb bruised and boiled in hog's lard, with mastic and olibanum in powder added to it after it is strained. In Sufex this herb is called ragwood. Externally it has been praised with good reason against swellings, and in inflammations: they are to be boiled to softnes, and applied as a warm poultice, with bread and oil.

### R A T T L E - G R A S S. *PEDICULARIS. RHINANTHUS.*

OF this there are two kinds, the red and the yellow.

DESCRIPTION. The common red rattle-graſs hath ſundry reddiſh hollow ſtakſ, and ſometimes green, riſing from the root, lying for the moſt part on the ground, yet ſome growing more upright, with many ſmall reddiſh or greeniſh leaves ſet on both ſides of a middle rib finely dented about the edges: the flowers ſtand at the tops of the ſtakſ and brancheſ, of a fine purliſh red colour; after which come flat blackiſh ſeed in ſmall huſks, which, lying loofe thereiñ, will rattle with ſhaking. The root conſiſts of two or three ſmall whitish ſtrings, with ſome fibreſ thereat.

The common yellow rattle hath ſeldom above one round green ſtakſ, riſing from the root, about half a yard or two feet high, and but few brancheſ thereon, having two long and ſomewhat broad leaves ſet at a joint, deeply cut in on the edges, reſemblinſ the comb of a cock, broadeſt next the ſtakſ. The flowers grow

at the tops of the stalks, with some shorter leaves with them, hooded after the same manner as the others, but many of a fair yellow colour, in some paler, in some whiter. The seed is contained in large husks; the root is smaller and slender, perishing every year.

PLACE. They grow in meadows and woods generally throughout England.

TIME. They are in flower from Midsummer till August.

GOVERNMENT AND VIRTUES. They are both under the dominion of the Moon. The red rattle is reckoned good to heal fistulas and hollow ulcers, and to stay the flux of humours to them, or any other flux of blood, being boiled in red or white wine and drunk.

The yellow rattle, or cock's comb, is held to be good for those that are troubled with a cough, or dimness of sight; if the herb, being boiled with beans, and some honey put thereto; be drunk, or dropped into the eyes, it draweth forth any skin, dimness, or film, from the sight, without trouble or pain.

#### R E S T - H A R R O W, OR C A M M O A K. ONONIS.

DESCRIPTION. COMMON rest-harrow riseth up with divers rough woody twigs, two or three feet high, set at the joints without order, with a little roundish leaves, sometimes more than two or three at a place, of a dark-green colour, without thorns while they are young, but afterwards armed in sundry places with short and sharp thorns. The flowers come at the tops of the twigs and branches, whereof it is full, fashioned like peafe, or bloom blossoms, but smaller, flatter, and somewhat close, of a faint purplish colour: after which come small pods, containing small, flat and round, seed. The root is blackish on the outside, and whitish within: very rough and hard to break when it is fresh and green, and as hard as horn when it is dried, thrusting down deep into the ground, and spreading likewise, every piece being likely to grow again if it be left in the ground.

PLACE. It groweth in many places of Great Britain, as well in arable as in waste ground.

TIME. It flowereth in general about the beginning or middle of July, and the seed is ripe in August.

GOVERNMENT AND VIRTUES. It is under the dominion of Mars. It is good to provoke urine and to break and expel the stone, which the powder of the bark of the root taken in wine performs effectually. Mathiolus saith, the same helpeth the disease called *hernia carnosa*, or fleshy rupture, by taking the said powder for some months together constantly, and that it hath cured some which seemed incurable by any other means than by cutting or burning. The decoction thereof, made with some vinegar, and gargled in the mouth, easeth the tooth-ach, especi-

ally when it comes of rheum; and is very powerful to open obstructions of the liver and spleen, and other parts. A distilled water, made in balneo mariæ with four pounds of the roots hereof, first sliced small, and afterwards steeped in a gallon of Canary wine, is very good for all the purposes aforesaid, and to cleanse the passages of the urine. The powder of the said root made into an electuary or lozenges with sugar, as also the bark of the fresh roots boiled tender, and afterwards beaten into a conserve with sugar, worketh the like effect. The powder of the roots strewed upon the brims of ulcers, or mixed with any other convenient thing, and applied, consumeth the hardness, and causeth them to heal the better.

### R O C K E T. BUNIAS.

AS the garden-rocket is rather used as a fallad-herb than to any physical purposes, I shall omit it, and only speak of the common wild rocket.

**DESCRIPTION.** The common wild rocket hath longer and narrower leaves, much more divided into slender cuts and jags on both sides of the middle rib, than the garden kinds have, of a sad green colour, from among which rise up divers stiff stalks, two or three feet high, sometimes set with the like leaves, but smaller, and much less upwards, branched from the middle into fundry stalks, bearing yellow flowers of four leaves each, as the others are, which afterwards yield small reddish seed, in small long pods, of a more bitter and hot biting taste than the garden kinds, as are the leaves likewise.

**PLACE.** It is found wild in most places of Great Britain.

**TIME.** It flowereth about June and July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** The wild rockets are forbidden to be used alone, because their sharpness fumeth into the head, causing ach and pain: and are no less hurtful to hot and choleric persons, for fear of inflaming their blood. Mars rules them. The wild rocket is more strong than the garden kinds; it serveth to help digestion, and provoketh urine exceedingly. The seed is used to cure the bitings of serpents, the scorpion, the shrew-mouse, and other poisons, and expelleth the worms and other noisome creatures that breed in the body. The herb, boiled or stewed, and some sugar put thereto, helpeth the cough in children, being taken often. The seed also taken in drink, taketh away the ill scent of the arm-pits, increaseth milk in nurses, and wasteth the spleen. The seed, mixed with honey, and used on the face, cleanfeth the skin from spots, morphew, and other discolorings; and, used with vinegar, taketh away freckles and redness in the face or other parts; and, with the gall of an ox, it amendeth foul scars, black spots, and the marks of the small-pox,

WINTER ROCKET, OR CRESSES. *SISYMBRIUM.*

**DESCRIPTION.** WINTER rocket, or winter cresses, hath divers somewhat-like turnip-leaves, with smaller pieces next the bottom, and broader at the ends, which so abide all winter, (if it spring up in autumn, when it is used to be eaten,) from among which rise up divers small round stalks full of branches, bearing many small yellow flowers of four leaves each, after which come small long pods with reddish seed in them. The root is rather stringy, and perisheth every year after the seed is ripe.

**PLACE.** It groweth of its own accord in gardens, and fields by the way-sides, in divers places.

**TIME.** It flowereth in May, and seedeth in June, and then perisheth.

**GOVERNMENT AND VIRTUES.** This is profitable to provoke urine, to help the strangury, and to expel gravel and the stone; it is also of good effect in the scurvy. It is found by experience to be a good herb to cleanse inward wounds; the juice or decoction being drunk, or outwardly applied to wash foul ulcers and sores, cleanseth them by sharpness, and hindereth the dead flesh from growing therein, and healeth them by the drying quality.

ROSES. *Rosa.*

I HOLD it needless to trouble the reader with a description of these, since both the garden roses and the wild roses of the briars are well enough known; take therefore the virtues of them as followeth; and first I shall begin with the garden kinds.

**GOVERNMENT AND VIRTUES.** Red roses are under Jupiter, damask under Venus, and white under the Moon. The white and the red roses are cooling and drying, and yet the white is taken to exceed the red in both those properties, but is seldom used inwardly in medicine. The bitterness in the roses when they are fresh, especially the juice, purgeth choler and watery humours; but, being dried, and that heat which caused the bitterness being consumed, they have then a binding quality; those also that are not full blown do both cool and bind more than those that are full blown, and the white roses more than the red. The decoction of red roses, made with wine, and used, is very good for the head-ach, and pains in the eyes, ears, throat, and gums, as also for the fundament, the lower bowels, and the matrix. The same decoction, with the roses remaining in it, is profitably applied to the region of the heart to ease the inflammation therein; as also St. Anthony's fire, and many diseases of the stomach. Being dried and beaten to powder, and taken in steeled wine or water, it helpeth to stay women's courses. The yellow threads in the middle of the red-roses, (which are erroneously called

the rose-feed,) being powdered, and drunk, in the distilled water of quinces, stayeth the defluxion of rheum upon the gums and teeth, preserving them from corruption, and fasteneth them if they be loose, being washed and gargled therewith, and some vinegar of squills added thereto. The heads, with feed, being used in powder, or in a decoction, stay the lask and spitting of blood. Red roses do strengthen the heart, stomach, and liver, and the retentive faculty; they mitigate the pains that arise from heat, afflue inflammatiōns, procure rest and sleep, stay running of the reins and fluxes of the belly; the juice of them doth purge and cleanse the body from choler and phlegm. The husks of the roses, with the beards and nails, are binding and cooling, and the distilled water of either of them is good for heat and redness in the eyes, and to stay and dry up the rheums and watering of them. Of the red roses are usually made many compositions, all serving to sundry good uses, viz. electuary of roses; conserve, both moist and dry, which is more usually called sugar of roses; syrup of dried roses, and honey of roses; the cordial powder called *diarrhodon abbatis* and *aromaticum rosarum*; the distilled water of roses, vinegar of roses, ointment and oil of roses, and the rose-leaves dried, which, although no composition, are yet of very great use and effect. The electuary is purging, whereof two or three drachms taken by itself in some convenient liquor is a purge sufficient for a weak constitution; but may be increased to six drachms, according to the strength of the patient. It purgeth choler without trouble, and is good in hot fevers, and pains of the head arising from hot choleſic humours and heat in the eyes, the jaundice also, and joint-achs proceeding of hot humours. The moist conserve is of much use, both binding and cordial; for, until it be about two years old, it is more binding than cordial, and after that more cordial than binding; some of the younger conserve, taken with *mithridatum*, mixed together, is good for those that are troubled with distillations of rheum from the brain to the nose, and defluxions of rheum into the eyes, as also for fluxes and lasks of the belly; and, being mixed with the powder of mastic, is very good for the running of the reins, and for the looseness of humours in the body. The old conserve, mixed with *aromaticum rosarum*, is a very good cordial against faintings, swoonings, weakness, and tremblings of the heart, strengthening both it and a weak stomach, helpeth digestion, stayeth casting, and is a very good preservative in the time of infection. The dry conserve, which is called sugar of roses, is a very good cordial to strengthen the heart and spirits, as also to stay defluxions. The syrup of dried red roses strengtheneth a stomach given to casting, cooleth an over-heated liver, comforteth the heart, resisteth putrefaction and infection, and helpeth to stay lasks and fluxes. Honey of roses is much used in gargles and lotions, to wash sores, either in the mouth, throat, or other parts, both to

heal them and to stay the fluxes of humours falling upon them ; it is also used in clysters. The cordial powders, called *diarrhodon abbatis* and *aromaticum roscarum*, do comfort and strengthen the heart and stomach, procure an appetite, help digestion, stop vomiting, and are very good for those that have slippery bowels, to strengthen them and to dry up their moisture. Red-rose water is of a well-known and familiar use on all occasions, (and better than damask-rose water,) being cooling and cordial, quickening the weak and faint spirits, used either in meats or broths, to wash the temples, to smell to at the nose, or to smell the sweet vapours thereof out of a perfuming-pot, or cast on a hot fire-shovel ; it is also of good use against the redness and inflammations of the eyes, to bathe them therewith, and the temples of the head also against pain and ach, for which purpose also vinegar of roses is of great service, and to procure rest and sleep, if some thereof and rose-water together be used to smell to, or the nose and temples moistened therewith, but more usually to moisten a piece of red-rose cake cut fit for the purpose, and heated between a double-folded cloth, with a little beaten nutmeg, and poppy-seed strewed on the side that must lie next to the forehead and temples, and bound thereto all night. The ointment of roses is much used against heat and inflammations in the head, to anoint the forehead and temples, and, being mixed with *unguentum populeon*, to procure rest ; it is also used for the heat of the liver, of the back and reins, and to cool and heal pushes, wheals, and other red pimples rising in the face or other parts. Oil of roses is not only used by itself to cool any hot swellings or inflammations, and to bind and stay fluxes of humours unto sores, but is also put into ointments and plasters that are cooling and binding, to restrain the flux of humours. The dried leaves of the red roses are used both inwardly and outwardly, being cooling, binding, and cordial ; for with them are made both *aromaticum roscarum*, *diarrhodon abbatis*, and *laccharum roscarum*, each of whose properties are before declared. Rose-leaves and mint, heated and applied outwardly to the stomach, stay castings, and very much strengthen a weak stomach ; and, applied as a fomentation to the region of the liver and heart, do much cool and temper them, and also serve instead of a rose-cake, to quiet the over-hot spirits, and cause rest and sleep. The syrup of damask roses is both simple and compound, and made with agaric. The simple solutive syrup is a familiar safe, gentle, and easy, medicine, purging choleric, taken from one ounce to three or four ; yet this is remarkable herein, that the distilled water of this syrup should notably bind the belly. The syrup with agaric is more strong and effectual, for one ounce thereof by itself will open the body more than the other, and worketh as much on phlegm as choleric. The compound syrup is more forcible in working

on melancholy humours, and against the leprosy, itch, tetters, &c. and the French disease. Also honey of roses solutive is made of the same infusions that the syrup is made of, and therefore worketh the same effect both opening and purging, but is oftener given to phlegmatic than choleric persons, and is more used in clysters than in potions, as the syrup made with sugar is. The conserve and preserved leaves of these roses are also operative in gently opening the belly.

The simple water of the damask roses is chiefly used for fumes to sweeten things, as the dried leaves thereof to make sweet powders and fill sweet bags. The wild roses are few or none of them used in physic, but yet are generally held to come near the nature of the manured roses. The fruit of the wild brier, which are called hops, being thoroughly ripe, and made into a conserve with sugar, besides the pleasantnes of the taste, doth gently bind the belly, and stay defluxions from the head upon the stomach, drying up the moisture thereof, and helpeth digestion. The brier-ball is often used, being made into powder and drunk, to break the stone, provoke urine when it is stopped, and to ease and help the cholic. In the middle of these balls are often found certain white worms, which, being dried and made into powder, and some of it drunk, is found, by experiance of many, to kill and void the worms of the belly.

#### R O S A . S O L I S ,   O R   S U N - D E W .   D R O S E R A .

**DESCRIPTION.** IT hath divers small round hollow leaves, somewhat greenish, but full of certain red hairs, which makes them seem red, every one standing upon its own footstalk, reddish-hairy likewise. The leaves are continually moist in the hottest day, for the hotter the sun shines on them the moister they are, with a certain sliminess, the small hairs always holding this moisture. Among these leaves rise up small slender stalks, reddish also, three or four fingers high, bearing divers small white knobs one above another, which are the flowers; after which, in the heads, are contained small seeds: the root is a few small hairs.

**PLACE.** It groweth usually in bogs and in wet places, and sometimes in moist woods and meadows.

**TIME.** It flowereth in June, and then the leaves are fitteſt to be gathered.

**GOVERNMENT AND VIRTUES.** The Sun rules it, and it is under the sign Cancer. Rosa folis is accounted good to help those that have ſalt rheum diſtilling on their lungs, which breedeth a conſumption; and therefore the diſtilled water thereof in wine is held fit and profitable for ſuch to drink, which water will be of a gold-yellow colour: the ſame water is held to be good for all other diſeases of the lungs, as pliſiſches, wheeſing, ſhortneſs of breath, or the cough; as alſo to heal the ulcers

that happen in the lungs: and it comforteth the heart and fainting spirits; the leaves outwardly applied to the skin will raise blisters, which hath caused some to think it dangerous to be taken inwardly. There is an usual drink made hereof, with *aqua vitae* and spices, frequently, and without any offence or danger, but to good purpose, used in qualms and passions of the heart.

### R O S E M A R Y. ROSMARINUS.

OUR garden rosemary is so well known, that I need not describe it.

TIME. It flowereth in April and May with us, and sometimes again in August.

GOVERNMENT AND VIRTUES. The Sun claims privilege in it, and it is under the celestial Ram. It is an herb of as great use with us as any whatsoever, not only for physical, but civil, purposes. The physical use of it (being my present task) is very much both for inward and outward diseases; for, by the warming and comforting heat thereof, it helpeth all cold diseases, both of the head, stomach, liver, and belly. The decoction thereof in wine helpeth the cold distillations of rheum in the eyes, and all other diseases of the head and brain, as the giddiness or swimming therein, drowsiness, or dulness of the mind and senses, the dumb palsy, or loss of speech, the lethargy and falling sickness, to be both drunk and the temples bathed therewith. It helpeth the pains in the gums and teeth, by rheum falling into them, or, by putrefaction, causing an evil smell from them, or a stinking breath. It helpeth a weak memory, and quickeneth the senses. It is very comfortable to the stomach in all the cold griefs thereof, helping digestion, the decoction or powder being taken in wine. It is a remedy for wind in the stomach or bowels, and expelleth it powerfully, as also wind in the spleen. It helpeth those that are liver-grown, by opening the obstructions thereof. It helpeth dim eyes, and procureth a clear sight, the flowers thereof being taken, all the while it is flowering, every morning fasting, with bread and salt. Both Dioscorides and Galen say, that, if a decoction be made thereof with water, and they that have the yellow jaundice do exercise their bodies presently after the taking thereof, it will certainly cure them. The flowers, and the conserve made of them, are good to comfort the heart, and to expel the contagion of the pestilence; to burn the herb in houses and chambers correcteth the air in them. The dried leaves smoked, help those that have a cough, phthisic, or consumption, by warming and drying the thin distillations which cause those diseases. The leaves are much used in bathings, and, made into ointments or oils, are good to help cold benumbed joints, sinews, or members. The chemical oil, drawn from the leaves and flowers, is a sovereign help for all diseases aforesaid, touching the temples and nostrils with

two or three drops, for all the diseases of the head and brain spoken of before ; as also, to take a drop, two, or three, as the case requireth, for the inward griefs : yet must it be done with discretion, for it is very quick and piercing, and therefore but a very little must be taken at a time. There is also another oil made in this manner : Take what quantity you will of the flowers, and put them in a strong glafs close stopped, tie a fine linen cloth over the mouth, and turn the mouth down into another strong glafs, which, being set in the sun, an oil will distil down into the lower glafs, to be preserved as precious for divers uses, both inward and outward, as a sovereign balm to heal the diseases before mentioned, to clear a dim sight, and to take away spots, marks, and scars, in the skin. This herb is good for a dull and melancholy man to make use of ; for, if they take the flowers, and make them into powder, and bind them on the right arm in a linen cloth, this powder, by working on the veins, will make a man more merry than ordinary.

#### R H U B A R B, OR R H A P H O N T I C. RHEUM.

THOUGH the name may speak it foreign, yet it grows with us in England, and that frequently enough, in our gardens ; and is nothing inferior to that which is brought us out of China ; take therefore a description at large of it, as followeth.

DESCRIPTION. At the first appearing out of the ground, when the winter is past, it hath a great round brownish head rising from the middle or sides of the root, which openeth itself into sundry leaves one after another, very much crumpled or folded together at the first, and brownish ; but afterwards it spreadeth itself, and becometh smooth, very large, and almost round, every one standing on a brownish stalk, of the thicknes of a man's thumb when they are grown to their fulness, and most of them two feet and more in length, especially when they grow in any moist or good ground ; and the stalk of the leaf also, from the bottom thereof to the leaf itself, is also two feet ; the breadth thereof from edge to edge, in the broadest place, is also two feet ; of a sad or dark green colour, of a fine tart or fourish taste, much more pleasant than the garden or wood sorrel. From among these riseth up sometimes, but not every year, a strong thick stalk, not growing so high as the patience, or garden-dock, with such round leaves as grow below, but smaller at every joint up to the top, and among the flowers, which are white, spreading forth into many branches, and consisting of five or six small white leaves each, after which come brownish three-square seed, like unto other docks, but larger. The root groweth in time to be very large, with divers great spreading branches from it, of a dark brownish or reddish colour on the outside, with a pale yellow skin under it, which covereth the inner substance or root ;

which

which rind and skin being pared away, the root appeareth of so fresh and lively a colour, with fresh-coloured veins running through it, that the choicest of that rhubarb that is brought us from beyond the seas cannot excel it: which root, if it be dried carefully, and as it ought, (which must be, in our country, by the gentle heat of a fire, in regard the sun is not hot enough here to do it,) and every piece kept from touching one another, will hold its colour almost as well as when it is fresh; and hath been approved of, and commended, by those who have oftentimes used it.

PLACE. It groweth in gardens, and flowereth about the beginning or middle of June, and the seed is ripe in July.

TIME. The roots, that are to be dried and kept all the year following, are not to be taken up before the stalk and leaves be quite withered and gone, and that is not until the middle or end of October; and, if they be taken a little before the leaves do spring, or when they are sprung up, the roots will not have so good a colour with them.

#### GARDEN PATIENCE, OR MONKS RHUBARB. *RUMEX PATIENTIA.*

DESCRIPTION. This is a dock, bearing the name of rhubarb for some purging quality therein; and groweth up with large tall stalks, set with somewhat broad and long fair green leaves, not dented. The tops of the stalks, being divided into many small branches, bear reddish or purplish flowers, and three-square seed, like unto other docks. The root is long, great, and yellow, like unto the wild docks, but a little redder, and, if it be a little dried, sheweth less-discoloured veins than the next doth when it is dry.

#### GREAT ROUND-LEAVED DOCK, OR BASTARD RHUBARB.

*RUMEX OBTUSIFOLIUS.*

DESCRIPTION. THIS hath divers large, round, thin, yellowish-green, leaves, rising from the root, a little waved above the edges, every one standing on a thick and long brownish footstalk; from among which riseth up a pretty big stalk, about two feet high, with some such-like leaves growing thereon, but smaller: at the top whereof stand, in a long spike, many small brownish flowers, which turn into hard three-square shining brown seed, like the garden patience before described. This root grows larger, with many branches of great fibres, yellow on the outside, and somewhat pale yellow within, with some discoloured veins, like the rhubarb first described, but much less, especially when it is dry.

PLACE.

PLACE AND TIME. These also grow in gardens; they flower in June, and the seed is ripe in July.

GOVERNMENT AND VIRTUES. Mars claims predominancy over all the wholesome herbs: a drachm of the dried root of monks rhubarb, with a scruple of ginger, made into powder, and taken fasting in a draught or mēs of warm broth, purgeth choler and phlegm downwards, very gently and safely, without danger; the seed thereof, contrarily, doth bind the belly, and helpeth to stay any sort of lask or bloody flux. The distilled water thereof is very profitably used to heal scabs, as also foul ulcerous sores, and to allay the inflammations of them; the juice of the leaves or roots, or the decoction of them in vinegar, is used as a most effectual remedy to heal scabs and running sores.

The bastard rhubarb hath all the properties of the monks rhubarb, but is more effectual for both inward and outward diseases. The decoction thereof with vinegar, dropped into the ears, taketh away the pains; gargled in the mouth, taketh away the tooth-ach, and, being drunk, healeth the jaundice. The seed thereof easeth the gnawing and gripping pains of the stomach, and taketh away loathing. The root thereof helpeth the ruggedness of the nails, and, being boiled in wine, helpeth the swelling of the throat, commonly called the king's evil, as also the swellings of the kernels of the ears. It helpeth them that are troubled with the stone, provoketh urine, and helpeth the dimness of the sight. The roots of this bastard rhubarb are used in opening and purging diet-drinks with other things to open the liver and to cleanse and cool the blood.

The properties of that which is called the *English Rhubarb* are the same with the former, but much more effectual, and hath all the properties of the true Indian rhubarb, except the force of purging, wherein it is but of half the strength thereof, and therefore a double quantity must be used; it likewise hath not that bitterness and astriction; in other things it worketh almost in an equal quality, which are these: it purgeth the body of choler and phlegm, being either taken of itself, made into powder and drunk in a draught of white wine, or steeped therein all night, and taken fasting, or put among other purges, as shall be thought convenient, cleansing the stomach, liver, and blood, opening obstructions, and helping those griefs that come thereof; as the jaundice, dropfy, swelling of the spleen, tertian and day agues, and pricking pains in the fides; and also it stayeth spitting of blood. The powder, taken with cassia dissolved and a little Venice turpentine, cleanseth the reins, and strengtheneth them, and is very effectual to stay the running of the reins. It is also given for the pains and swellings in the head, for those that are troubled with melancholy, and

helpeth the gout and the cramp. The powder of rhubarb, taken with a little mummia and madder-roots, in some red wine, dissolveth clotted blood in the body, happening by any fall or bruise, and healeth burstings and broken parts as well inward as outward: the oil, likewise, wheréin it hath been boiled, worketh the like effects; it is used to heal those ulcers that happen in the eyes and eye-lids, being steeped and strained; as also to assuage swellings and inflammations; and, applied with honey, or boiled in wine, it taketh away all black and blue spots or marks. Whey or white wine are the best liquors to steep it in, and thereby it worketh more effectually in opening obstructions, and purging the stomach and liver.

### M E A D O W R U E. *THALICTRUM.*

**D E S C R I P T I O N.** MEADOW RUE riseth up with a yellow stringy root, much spreading in the ground, and shooting forth new sprouts round about, with many herby green stalks, two feet high, crested, set with joints here and there, and many large leaves on them below, being divided into smaller leaves, nicked or dented in the forepart, of a sad-green colour on the upper side, and pale-green underneath. Toward the top of the stalk there shoot forth divers short branches, on every one whereof there stand two, three, or four, small round heads or buttons, which, breaking the skin that incloseth them, shew forth a tuft of pale greenish-yellow threäds, which falling away, there come in their places small three-cornered pods, wherein is contained small, long, and round, seed. The plant hath a strong unpleasant smell.

**P L A C E.** It groweth in many places in England, in the borders of moist meadows, and by ditch-sides. Pliny writeth, that there is such friendship between it and the fig-tree, that it prospereth no where so well as under that tree, and delighteth to grow in sunny places.

**T I M E.** It flowereth about July, or the beginning of August.

**G O V E R N M E N T A N D V I R T U E S.** Dioscorides saith, that this herb, bruised and applied, perfectly healeth old sores: and the distilled water of the herb and flowers doth the like. It is used by some, among other pot-herbs, to open the body; but the roots, washed clean, boiled in ale, and drunk, are more opening than the leaves. The root, boiled in water, and the places of the body most troubled with vermin or lice washed therewith, while it is warm, destroyeth them utterly. In Italy it is used against the plague, and in Saxony against the jaundice. It is an enemy to the toad, as being a great enemy to poison. The ancient astrologers declare this herb hath a property of making a man chaste; but a woman it fills with lust.

## GARDEN RUE. RUTA.

GARDEN RUE is so well known, both by this name and the name *herb of grace*, that I shall not write any description of it, but shall only show the virtues of it, as followeth:

**GOVERNMENT AND VIRTUES.** It is an herb of the Sun, and under Leo. It provoketh urine, being taken either in meat or drink. The seed thereof, taken in wine, is an antidote against all dangerous medicines or deadly poisons. The leaves, taken either by themselves, or with figs and walnuts, is called Mithridates's counter-poison against the plague, and causeth all venomous things to become harmless. Being often taken in meat or drink, it abateth venery, and destroyeth the ability to beget children. A decoction made thereof, with some dried dill leaves and flowers, easeth all pains, inwardly drunk, and outwardly applied warm to the place grieved. The same being drunk, helpeth the pains both of the chest and sides, as also coughs and hardnes of breathing, the inflammations of the lungs, and the tormenting pains of the sciatica and of the joints, being anointed or laid to the places; as also the shaking fits of agues, by taking a draught before the fit. Being boiled or infused in oil, it is good to help the wind-cholic; it killeth and driveth forth the worms of the belly, if it be drunk after it is boiled in wine to the half with a little honey. It helpeth the gout or pains in the joints of hands, feet, or knees, applied thereunto; and, with figs it helpeth the dropsy, being bathed therewith; being bruised, and put into the nostrils, it stayeth the bleeding thereof. It taketh away wheals and pimples, if, being bruised with a few myrtle-leaves, it be made up with wax and applied. It cureth the morphew, and taketh away all sorts of warts, if boiled in wine with some pepper and nitre, and the places rubbed therewith; and, with alum and honey, helpeth the dry scab, or any tetter or ring-worm. The juice thereof, warmed in a pomegranate shell or rind, and dropped into the ears, helpeth the pains of them. The juice of it and fennel, with a little honey, and the gall of a cock, put thereto, helpeth the dimness of the eye-sight. An ointment made of the juice thereof, with oil of roses, ceruse, and a little vinegar, cureth St. Anthony's fire, and all foul running sores in the head, and the stinking ulcers of other parts. The antidote used by Mithridates every morning fasting to secure himself from any poison or infection was this: Take twenty leaves of rue beaten together into a mass with twenty juniper-berries, which is the quantity appointed for every day. Another electuary is made thus: Take of nitre, pepper, and cummin-seed, of each equal parts; of the leaves of rue, clean picked, as much in weight as all the other three; beat them well together, and put to it as much honey as

will make it up into an electuary; (but you must first steep your cummin-seed in vinegar twenty-four hours, and then dry it; or rather toast it in a hot fire-shovel, or in an oven;) and it is a remedy for the pains or griefs of the chest or stomach, of the spleen, belly, or fides; of the liver, by obstructions; of the reins and bladder, by the stopping of urine.

### R U P T U R E - W O R T. H E R N I A R I A.

**D E S C R I P T I O N.** THIS spreadeth very many small branches round about upon the ground, about a span long, divided into many parts, full of small joints set very thick together, whereat come forth two very small leaves of a yellowish-green colour, branches and all, where groweth forth also a number of exceeding small yellowish flowers, scarcely to be discerned from the stalks and leaves, which turn into seeds as small as the very dust. The root is very long and small, thrusting down deep into the ground. This hath no smell nor taste at first, but afterward hath a little astringent taste, without any manifest heat, yet a little bitter and sharp.

**P L A C E.** It groweth in dry, sandy, rocky, places.

**T I M E.** It is fresh and green all the summer.

**G O V E R N M E N T A N D V I R T U E S.** This herb is under the dominion of Saturn. Rupture-wort hath not its name in vain, for it is found by experience to cure the rupture, not only in children, but also in grown persons; if the disease be not too inveterate, by taking a drachm of the powder of the dried herb every day in wine, or the decoction made in wine and drunk, or the juice or distilled water of the green herb taken in the same manner; and helpeth all other fluxes, either in men or women; vomitings also, and the gonorrhœa; or running of the reins, being taken any of the ways aforesaid. It doth also most assuredly help those that have the strangury, or are troubled with the stone or gravel. The same also much helpeth all stitches in the side, all gripping pains in the stomach or belly, the obstructions of the liver, and cureth the yellow jaundice likewise. It killeth also the worms in children; being outwardly applied, it heals wounds, and helps defluxions of rheum from the head to the eyes, nose, and teeth, being bruised green and bound thereto. It also drieth up the moisture of fistulous ulcers, or any other that are foul and spreading.

### R U S H E S. J U N C U S.

ALTHOUGH there are many kinds of rushes, yet I shall confine myself to those which are best known, and most medicinal, as the bull-rushes, and other of the soft and smooth kinds; which grow so commonly in almost every place in

Great-

Great-Britain, and are so generally noted, that it is needless to write any description of them. Briefly then take the virtues of them, as followeth:

**GOVERNMENT AND VIRTUES.** The seeds of these soft rushes, say Dioscorides and Galen, toasted, and drunk in wine and water, stay the lask, and the courses when they come down too abundantly; but it causeth the head-ach. They likewise provoke sleep, but must be given with caution. Pliny saith, the root, boiled in water to the consumption of one third, helpeth the cough.

### R Y E. SECAL.

**GOVERNMENT AND VIRTUES.** RYE is more digesting than wheat. The bread and the leaven thereof ripeneth and breaketh imposthumes, biles, and other swellings; the meal of rye, put between a double cloth, moistened with a little vinegar, and heated in a pewter dish, and bound fast to the head while it is hot, doth much ease the continual pains of the head. Mathiolus saith, that the ashes of rye-straw, put into water, and suffered therein a day and a night, will heal the chaps of the hands or feet.

### R I C E. ORYZA.

**DESCRIPTION.** THIS grain, or corn, riseth up with a stronger stalk than wheat, about a yard high, with sundry joints, and a large thick leaf at each of them, like the reed; at the top it beareth a spiked tuft spread into branches, whose blooming is said to be purplish, with the seed standing severally on them, inclosed in hard brown straked husks, and an arm at the head of every one of them; which, being hulled, is very white, of the bigness almost of wheat-corns, blunt at both ends.

**NAMES.** Rice is called in Latin *oryza*, and the Italians call it *rizo*, the French *ris*.

**PLACE AND TIME.** This grain originally was brought out of the East-Indies, where in many places it yieldeth two crops in a year, being the chiefest corn they live upon, and not with them only, but through all Ethiopia and Africa; and thence hath been brought into Syria, Egypt, Italy, &c. It delighteth to grow in moist grounds, and is ripe about the middle of autumn.

**GOVERNMENT AND VIRTUES.** It is a solar grain. The physical use thereof is chiefly to stay the lasks and fluxes of the stomach and belly, especially if it be a little parched before it be used, and steep quenched in the milk wherein it is boiled, being somewhat binding and drying; it is thought also to increase seed, being boiled in milk, and some sugar and cinnamon put thereto; the flower of rice is of the same property

property, and is sometimes also put into cataplasms that are applied to repel humours from flowing or falling to the place ; and is also conveniently applied to women's breasts, to stay inflammations therein.

### SWEET OR AROMATICAL REED. ARUNDO.

KINDS AND NAMES. THERE is one sort called *calamus aromaticus Mathiolii*, Mathiolus's aromatical reed ; a second called *calamus aromaticus Syriacus vel Arabicus suppositivus*, the spurious Syrian or Arabian aromatical reed ; and the third, the true *acorus* of Dioscorides, or sweet-smelling reed, called in shops *calamus aromaticus*, and likewise *acorus verus sive calamus officinarum*.

DESCRIPTION. 1. Mathiolus's aromatical reed. This groweth with an upright tall stalk, set full of joints at certain spaces up to the top, (not hollow, but stuffed full of a white spongeous pith, of a gummy taste, somewhat bitter, and of the bigness of a man's finger,) and at every one of them a long narrow leaf, of a dark-green colour, smelling very sweet, differing therein from all other kinds of reeds ; on the tops whereof groweth a bushy or feather-like panicle, resembling those of the common reed. The root is knobby, with divers heads thereat, whereby it increaseth and shooteth forth new heads of leaves, smelling also very sweet, having a little binding taste, and sharp withal.

2. The supposed Syrian or Arabian aromatical reed riseth up from a thick root three or four inches long, big at the head and small at the bottom, with one stalk, sometimes more, two cubits high, being straight, round, smooth, and easy to break into splinters ; full of joints, and about a finger's thicknes, hollow and spongy within, of a whitish yellow colour ; the stalk is divided into other branches, and they again into other smaller ones, two usually set together at a joint, with two leaves under them likewise, very like unto the leaves of *lysimachia*, the willow-herb or loosestrife, but les, being an inch and a half long ; compassing the stalk at the bottom, with sundry veins running all the length of them ; from the joints rise long stalks, bearing sundry yellow small flowers, made of leaves like unto *lysimachia*, with a small pointel in the middle, after which follow small blackish long heads or seed-vessels, pointed at the end, and having in them small blackish seed : the stalk hath little or no scent, yet not unpleasant, as Alpinus faith, being bitter, with a little acrimony therein ; but Bauhinus faith, it is of an aromatical taste, and very bitter.

3. The sweet-smelling-reed, or *calamus officinarum*, or *acorus verus*, hath many flags, long and narrow fresh green leaves, two feet long or more ; yet oftentimes somewhat brownish at the bottom, the one rising or growing out of the side

of the other, in the same manner that other flags or flower-de-luces grow, which are thin on both sides, and ridged or thickest in the middle; the longest, for the most part, standing in the midst, and some of them as it were curled or plaited towards the ends or tops of them; smelling very sweet, as well when they are green and fresh as when they are dried and kept a long time; which do so abide in a garden a long time, as though it never did nor never would bear flower; the leaves every year dying down to the ground, and shooting out afresh every spring; but, after three or four years abiding in a place, it shooteth forth a narrow long leaf by itself, flat like unto the other leaves, especially from the middle upwards; but from the bottom to the middle it is flat, at which place cometh forth one long round head, very seldom two; in form and bigness like unto the catkin or aglet of the hazel-nut tree, growing upright, and of the length and thickness of one's finger, or rather bigger; set with several small lines or divisions, like unto a green pine-apple; of a purplish green colour for the most part; out of which bunches shoot forth small pale whitish flowers, consisting of four small leaves apiece, without so good a scent as the leaves, falling quickly away, and not yielding any seed. The root is thick and long, lying under the surface of the ground, shooting forward, and with small roots or suckers on all sides, like unto the garden valerian, whitish on the outside, or greenish if it lie above the ground, and more pale or whitish on the inside, with many joints thereabouts, and whereat it hath or doth shoot forth long thick fibres underneath, whereby it taketh strong hold in the ground.

PLACE AND TIME. The first is said by Mathiolus, and others, to grow in India, Syria, and Judæa; the dry stalks of the second are said to grow at the foot of Mount Libanus, in Syria, not far from Tripoli, in the wet grounds there; the third in sundry moist places in Egypt, and by the lake Gennefareth in Judæa, and in divers places of Syria and Arabia.

The other *calamus* of the shops, or true *acorus*, groweth in many places of Turkey, in moist grounds, whence the largest roots, the firmest, whitest, and sweetest, are brought unto us; it groweth also in Russia and thereabouts, in great plenty. It is sometimes found in moist grounds in Yorkshire, and the northern parts of England.

GOVERNMENT AND VIRTUES. These reeds are under the dominion of Venus, of a temperate quality. The *calamus* of Dioscorides, he saith, hath these properties: It provoketh urine, and, boiled with grass-roots and smallage, it helpeth those that have the dropsy; it fortifieth the reins, and is good against the strangury, and is also profitable for those that have a rupture; the fumes of it, taken through a tobacco-pipe, either by itself or with some dried turpentine,

cure

cure a cough; it is put into baths for women to sit in, also in clysters to ease pains.

It is used in mollifying oils and plasters that serve to ripen hard impostumes, as also for the sweet scent thereof. Galen saith, it being of a temperature moderate, between heat and cold, and somewhat astringent, and having a very little acrimony, it is profitably used among other things that help the liver and stomach, doth provoke urine, is used with other things in fomentations for inflammations, and gently to move the courses. Dioscorides saith, that the sweet flag is good to provoke urine, if the decoction thereof be drunk. It helpeth to ease pains in the sides, liver, and breast, as also to ease the griping pains of the cholic and cramp, and is good against ruptures; it wasteth the spleen, helps the strangury, and bitings of venomous creatures. It is also good in baths for women to sit in, for distempers of the womb. The juice, dropped into the eyes, drieth rheums therein, and cleareth the sight, taking away all films that may hurt them.

The root is of much use in all antidotes against poison or infection; it is a good remedy against a stinking breath, to take the root fasting every morning for sometime together. The hot fumes of the decoction made in water, and taken in at the mouth through a funnel, are good to help those that are troubled with a cough. A drachm of the powder of the roots, with as much cinnamon, taken in a draught of wormwood wine, is good to comfort and strengthen a cold weak stomach: the decoction thereof is good against convulsions or cramps, and for falls and inward bruises. An oxymel or syrup made hereof in this manner is effectual for all cold spleens and livers: Take of the roots of acorus one pound; wash and pick them clean, then bruise them, and steep them for three days in vinegar, after which time let them be boiled together to the consumption of the one half of the vinegar, which being strained, set to the fire again, putting thereto as much honey as is sufficient to make it into a syrup; an ounce of this syrup in the morning, in a small draught of the decoction of the same roots, is sufficient for a dose; the whole roots, preserved either in honey or sugar, are effectual for the same purposes; but the green roots, preserved, are better than the dried roots, which are first steeped and then preserved. It likewise mollifies hard tumours in any part of the body.

### S A F F R O N. CROCUS.

THE herb needs no description, it being known generally where it grows.

PLACE. It grows frequently at Walden in Essex, and in Cambridgeshire.

GOVERNMENT AND VIRTUES. It is an herb of the Sun, and under the Lion; and therefore strengthens the heart exceedingly. Let not above ten grains be given.

at one time, for, being taken in an immoderate quantity, it may hurt the heart instead of helping it. It quickeneth the brain, for the Sun is exalted in Aries, as well as he hath his house in Leo; it helpeth the consumption of the lungs and difficulty of breathing; it is an excellent thing in epidemical diseases, as pestilence, small-pox, and measles. It is a notable expulsive medicine, and remedy for the yellow jaundice. My own opinion is, that hermodactils are nothing else but the roots of saffron dried; and my reason is, that the roots of all crocus, both white and yellow, purge phlegm as hermodactils do; and, if you dry the roots of any crocus, neither your eyes nor your taste shall distinguish them from hermodactils.

## S A G E.\* SALVIA.

OUR ordinary garden sage is so well known by every inhabitant of this kingdom, that it needeth no description.

TIME. It flowereth in or about June, July, and August.

GOVERNMENT AND VIRTUES. Jupiter claims this, and it is good for the liver, and to breed good blood. A decoction of the leaves and branches of sage, saith Dioscorides, provoketh urine, bringeth down women's courses, helpeth to expel the dead child, and causeth the hair to become black; it stayeth the bleeding of wounds, and cleanseth foul ulcers or sores. Orpheus saith, three spoonfuls of the juice of sage taken fasting, with a little honey, doth presently stay the spitting or casting up of blood. For them that are in a consumption these pills are much commended: Take of spikenard and ginger, each two drachms; of the seed of sage, toasted at the fire, eight drachms; of long pepper, twelve drachms; all these being brought into fine powder, put thereto so much juice of sage as may make them into a mass for pills, taking a drachm of them every morning fasting, and so likewise at night, drinking a little pure water after them. Mathiolus saith, it is very profitable for all manner of pains of the head coming of cold and rheumatic humours, as also for pains of the joints, whether inward or outward, and therefore helpeth the falling sickness, the lethargy, such as are dull and heavy of spirit, the palsey, and is of much use in all defluxions of rheum from the head, and for the diseases of the chest or breast. The leaves of sage and nettles, bruised together, and laid upon the imposthume that riseth behind the ears, do assuage it much. The juice of sage, taken in warm water, helpeth a hoarseness and cough. The leaves sodden in wine, and laid upon the place affected with the palsey, helpeth much, if the decoction be drunk also. Sage taken

\* The occult virtues of saffron and sage are admirably combined in the SOLAR TINCTURE, with all solar herbs, antiscorbutics, purifiers of the blood, &c. &c. whence it is, in all scrophulous complaints, an absolute specific.

with wormwood is good for the bloody flux: Pliny saith, it helpeth the stinging and biting of serpents, killeth worms that breed in the ears and in sores. Sage is of excellent use to help the memory, warming and quickening the senses; and the conserve made of the flowers is used to the same purpose, and also for all the former recited diseases. The use of sage drunk with vinegar hath been of good use against the plague at all times. Gargles likewise are made with sage, rosemary, honey-suckles, and plantane, boiled in wine or water with some honey or alum put thereto, to wash sore mouths and throats. With other hot and comfortable herbs, sage is boiled to bathe the body and legs in the sunnier-time, especially to warm cold joints or sinews troubled with the palsey or cramp, and to comfort or strengthen the parts. It is much commended against the stitche or pains in the side coming of wind, if the place be fomented warm with the decoction thereof in wine, and the herb also, after the boiling, be laid warm thereto.

#### WOOD-SAGE. TEUCRIUM.

**DESCRIPTION.** WOOD-SAGE riseth up with square hoary stalks two feet high at the least, with two leaves at every joint, somewhat like other sage leaves, but smaller, softer, whiter, and rounder, and a little dented about the edges, and smelling somewhat stronger; at the tops of the stalks and branches stand the flowers on a slender long spike, turning themselves all one way when they blow, and are of a pale and whitish colour, smaller than sage, but hooded and gaping like it; the seed is blackish and round, four usually seen in a husk together; the root is long and stringy, with divers fibres thereat; and it abideth many years.

**PLACE.** It groweth in woods, and by wood-sides, as also in divers fields and by-lanes in Great Britain.

**TIME.** It flowereth in June, July, and August.

**GOVERNMENT AND VIRTUES.** The herb is under Venus. The decoction of wood-sage provoketh urine; it also provoketh sweat, digesteth humours, and discusseth swellings and nodes in the flesh. The decoction of the green herb made with wine, is a safe and sure remedy for those who by falls, bruises, or blows, doubt some vein to be inwardly broken, to disperse and void the congealed blood, and to consolidate the vein; it is also good for such as are inwardly or outwardly bursten, the drink used inwardly, and the herb applied outwardly; the same, used in the same manner, is found to be a sure remedy for the palsey. The juice of the herb, or the powder thereof dried, is good for moist ulcers and sores in the legs or other parts, to dry them, and causeth them to heal more speedily. It also cureth green wounds.

## S O L O M O N ' S S E A L . C O N V A L L A R I A .

**DESCRIPTION.** The common Solomon's seal riseth up with a round stalk about half a yard high, bowing or bending down, set with single leaves one above another, somewhat large, and like the leaves of the lily-convalley, or May-lily, with an eye of bluish upon the green, with some ribs therein, and more yellowish underneath. At the foot of every leaf, almost from the bottom up to the top of the stalk, come forth small, long, white, and hollow, pendulous flowers, somewhat like the flowers of May-lily, but ending in five long points, for the most part two together at the end of a long footstalk, and sometimes but one, and sometimes also two stalks with flowers at the foot of a leaf, which are without any scent at all, and stand all on one side of the stalk. After they are past, come in their place, small round berries, green at first, and blackish green, tending to blueness, when they are ripe, wherein lie small, white, hard, and stony, seed. The root is of the thickness of one's finger or thumb, white and knobbed in some places, with a flat circle, representing a seal, whence it took the name; lying along under the surface of the earth, and not running very low, but with many fibres underneath.

**PLACE.** It is frequent in divers places of Kent, Essex, and other counties.

**TIME.** It flowereth about May, or the beginning of June; and the root abideth and shooteth anew every year.

**GOVERNMENT AND VIRTUES.** Saturn owns the plant. The root of Solomon's seal is found by experience to be available in wounds, hurts, and outward sores; to heal and close up the lips of those that are green, and to dry up and restrain the flux of humours to those that are cold; it is good to stay vomitings and bleedings wheresoever, as likewise all fluxes in man or woman; also to knit any joint, which by weakness useth to be out of place, or will not stay in long when it is set; also to knit and join broken bones in any part of the body, the roots being bruised and applied to the place; it hath been found by late experience, that the decoction of the root in wine, or the bruised root put in wine or other drink, and after a night's infusion strained off, and drunk, hath relieved both man and beast, whose bones have been broken by any occasion, which is the most assured refuge of help to people of all countries that they can have: it is no less effectual to help ruptures and burstings, the decoction in wine, and the powder in broth or drink, being inwardly taken and outwardly applied to the place. The same is also available for inward or outward bruises, falls, or blows, both to dispel the congealed blood, and to take away the pains and the black-and-blue marks that abide after the hurt. The same also,

or the distilled water of the whole plant, used to the face or other parts of the skin, cleanseth it from morphew, freckles, spots, or marks whatsoever, leaving the place fresh, fair, and lovely; for which purpose it is much used by the Italian ladies, and is the principal ingredient of most of the cosmetics and beauty-wash advertised by perfumers at a high price.

### S A M P H I R E. CRITHMUM.

**DESCRIPTION.** ROCK-SAMPHIRE growtheth with a tender green stalk, about half a yard or two feet in height, branching forth almost from the very bottom, and stored with sundry thick, and almost round, somewhat long, leaves, of a deep green colour, sometimes three together, and sometimes more, on a stalk; and are fappy, and of a pleasant, hot, or spicy, taste. At the tops of the stalk and branches stand umbels of white flowers, and after them come large seed, bigger than fennel-seed, yet somewhat like. The root is great, white, and long, continuing many years, and is of an hot spicy taste.

**PLACE.** It growtheth on the rocks that are often moistened by the sea.

**TIME.** It flowereth and feedeth at the end of July and August.

**GOVERNMENT AND VIRTUES.** It is an herb of Jupiter, and was in former times wont to be used more than it now is. It is a safe herb, very pleasant both to the taste and stomach, helping digestion, and in some sort opening the obstructions of the liver and spleen, provoking urine, and helping thereby to wash away the gravel and stone.

### S A N I C L E. SANICULA.

**DESCRIPTION.** The ordinary sanicle sendeth forth many great round leaves, standing upon long brownish stalks, every one cut or divided into five or six parts, and some of those also cut in, somewhat like the leaf of a crow's foot or dove's foot, finely dented about the edges, smooth, and of a dark-green shining colour, and sometimes reddish about the brims, from among which rise up small round green stalks, without any joint or leaf thereon, except at the top, where it branches forth into flowers, having a leaf divided into three or four parts at that joint with the flowers, which are small and white, starting out of small round greenish-yellow heads, many standing together in a tuft; in which afterwards are the seed contained, which are small round burs, somewhat like the seeds of clover, and stick in the same manner upon any thing that they touch. The root is composed of many black strings of fibres set together at a little long head, which abideth with the green leaves all the winter.

**PLACE.** It is found in many shadowy woods and other places in England.

**TIME.**

TIME. It flowereth in June, and the seed is ripe shortly after.

GOVERNMENT AND VIRTUES. This is one of Venus's herbs. It is exceeding good to heal green wounds, or any ulcers, imposthumous, or bleedings, inwardly. It wonderfully helps those that have any tumours in any part of their bodies, for it represseth and dissipateth the humours, if the decoction or juice thereof be taken, or the powder in drink, and the juice used outwardly; for there is not found any herb that can give such present help either to man or beast when the disease falleth upon the lungs or throat, and to heal up all the putrid malignant ulcers in the mouth, throat, and privities, by gargling or washing with the decoction of the leaves and root, made in water, and a little honey put thereto. It helpeth to stay fluxes of blood either by the mouth, urine, or stool, and lasks of the belly, the ulcerations of the kidneys also, and the pains in the bowels, and the gonorrhœa or running of the reins, being boiled in wine or water, and drunk: the same is also no less powerful to help any ruptures or burstings, used both inwardly and outwardly; and it is effectual in binding, restraining, consolidating, heating, drying, and healing.

### SARACENS CON SOUND, OR SARACENS WOUND-WORT.

*SOLIDAGO.*

DESCRIPTION. THIS groweth very high, sometimes with brownish stalks, and other times with green and hollow, to a man's height, having many long and narrow green leaves snipped about the edges, somewhat like those of the peach-tree, or willow-leaves, but not of such a white-green colour: the tops of the stalks are furnished with many pale yellow star-like flowers standing in green heads, which, when they are fallen, and the seed ripe, (which is somewhat long, small, and of a yellowish-brown colour, wrapped in down,) is therewith carried away by the wind. The root is composed of many strings or fibres, set together at a head, which perish not in winter, though the stalks dry away. The taste of this herb is strong and unpleasant, and so is the smell. Wonders are related of the virtues of this herb against hurts and bruises; and it is a great ingredient in the Swis's arquebusade-water. It is balsamic and diuretic.

PLACE. It groweth in moist and wet grounds by the side of woods, and sometimes in moist places of the shady groves, as also by the water-side.

TIME. It flowereth generally about the middle of July, and the seed is soon ripe, and carried away by the wind.

GOVERNMENT AND VIRTUES. Saturn owns this herb. Among the Germans, this wound-herb is preferred before all others of the same quality. Being boiled in wine,

wine, and drunk, it helpeth the indifposition of the liver, and freeth the gall from obstructions, whereby it is good for the yellow jaundice, and for the dropfy in the beginning of it, for all inward ulcers of the reins, or elsewhere, and inward wounds and bruises; and, being steeped in wine and then distilled, the water thereof drunk is of singular service to ease all gnawings in the stomach, or other pains of the body, as also the pains of the mother; and, being boiled in water, it helpeth continual agues; and this said water, or the simple water of the herb distilled, or the juice or decoction, are very effectual to heal any green wound, old sore, or ulcer, cleansing them from corruption, and quickly healing them up. It is no less effectual for the ulcers in the mouth or throat, be they never so foul or stinking, by washing and gargling them therewith. Briefly, whatsoever hath been fained of bugle or sanicle may be found herein.

#### SAUCE-ALONE, OR JACK-BY-THE-HEDGE. ERYSIMUM.

**DESCRIPTION.** THE lower leaves of this are rounder than those that grow towards the tops of the stalks, and are set singly, one at a joint, being somewhat round and broad, and pointed at the ends, dented also about the edges, somewhat resembling nettle-leaves for the form, but of a more fresh green colour, and not rough or prickling: the flowers are very small, and white, growing at the tops of the stalks one above another; which being past, there follow small and long round pods, wherein are contained small round seeds, somewhat blackish. The root is stringy and thready, perishing every year after it hath given seed, and raiseth itself again of its own sowing. The plant, or any part thereof, being bruised, smelleth of garlic, but is much more pleasant, and tasteth somewhat hot, sharp, and biting, almost like rocket.

**PLACE.** It groweth under walls, and by hedge-sides, and pathways in fields in many places.

**TIME.** It flowereth in June, July, and August.

**GOVERNMENT AND VIRTUES.** It is an herb of Mercury. This is eaten by many country people as sauce to their salt fish, and helpeth to digest the crudities and other corrupt humours engendered thereby; it warmeth the stomach, and causeth digestion. The juice thereof, boiled with honey, is reckoned to be as good as hedge-mustard for the cough, to cut and expectorate the tough phlegm. The seed, bruised and boiled in wine, is a good remedy for the wind-cholic, or the stone, being drunk warm. The leaves also or seed boiled, are good to be used in clysters to ease the pains of the stone. The green leaves are held to be good to heal ulcers in the legs.

## WINTER AND SUMMER SAVORY. SATUREIA.

BOTH these are so well known, (being constant inhabitants in our garden,) that they need no description.

GOVERNMENT AND VIRTUES. Mercury claims the dominion over this herb. It is a remedy against the cholic and iliac passion; the summer kind is the best. They are both of them hot and dry, especially the summer kind, which is both sharp and quick in taste, expelling wind in the stomach and bowels, and is a present help for the rising of the mother procured by wind, provoketh urine, and is much commended for women with child to take inwardly, and to smell often to. It cutteth tough phlegm in the chest and lungs, and helpeth to expectorate it the more easily: quickeneth the dull spirits in the lethargy, the juice thereof being snuffed or cast up into the nostrils. The juice, dropped into the eyes, cleareth a dull sight, if it proceed of thin cold humours distilling from the brain. The juice, heated with a little oil of roses, and dropped into the ears, easeth them of the noise and stinging in them, and of deafness also. Outwardly applied, with flour, in manner of a poultice, it giveth ease to the sciatica, and members having the palsey, heating and warming them; and taketh away their pains. It also taketh away the pains that come of stinging by bees, wasps, or any venomous reptile.

## SAVIN. JUNIPERUS.

TO describe a plant so well known is needless, it being almost in every garden, and remaining green all the winter.

GOVERNMENT AND VIRTUES. It is under the dominion of Mars, being hot and dry in the third degree; and, being of exceeding clean parts, is of a very digesting quality: if you dry the herb into powder, and mix it with honey, it is an excellent remedy to cleanse old filthy ulcers, and fistulas; but it hinders them from healing. The same is good to break carbuncles and plague-fores; it also helpeth the king's evil, being applied to the place: being spread upon a piece of leather, and applied to the navel, it kills the worms in the belly; helps scabs and the itch, running sores, cankers, tetterers, and ringworms; and, being applied to the place, may happily cure venereal sores. This I thought proper to mention, as it may safely be used outwardly; but inwardly it cannot be taken without manifest danger, particularly to pregnant women, or those who are subject to flooding.

## COMMON WHITE SAXIFRAGE. SAXIFRAGA.

DESCRIPTION. THIS hath a few small reddish kernels, covered with some skins lying among divers small blackish fibres, which send forth several round, faint

or

or yellowish-green, leaves, greyish underneath, lying above the ground, unevenly dented about the edges, and somewhat hairy green stalks, two or three feet high, with a few such round leaves as grow below, but smaller, and somewhat branched at the top, whereon stand pretty large white flowers of five leaves each, with some yellow threads in the middle, standing in a long-crested brownish-green busk. After the flowers are past, there ariseth sometimes a round hard head, forked at the top, wherein is contained small blackish seed; but usually they fall away without any seed; and it is the kernels or grains of the root which are usually called the white-saxifrage seed, and so used.

PLACE. It groweth in many parts of Great Britain; in meadows and grassy sandy places; it used to grow near Lamb's Conduit, on the back-side of Gray's Inn.

TIME. It flowereth in May, and is then gathered, as well for that which is called the seed as to distil: for it quickly perisheth down to the ground in hot weather.

GOVERNMENT AND VIRTUES. It is very effectual to cleanse the reins and bladder, and to dissolve the stone engendered in them, and to expel it and the gravel by urine; to provoke urine also, and to help the strangury; for which purposes the decoction of the herb or roots in white wine, or the powder of the small kernaly root, which is called the seed, taken in white wine, or in the same decoction made with white wine, is most usual. The distilled water of the whole herb, roots, and flowers, is most commonly taken. It freeth and cleaneth the stomach and lungs from thick and tough phlegm. There are not many better medicines to break the stone than this, or to cleanse the urinary passages, and cure the gravel.

#### B U R N E T - S A X I F R A G E. PIMPINELLA.

DESCRIPTION. THE greater sort of our English burnet-saxifrage groweth up with divers long stalks of winged leaves, set directly opposite one to another on both fides, each being somewhat broad, and a little pointed and dented about the edges, of a sad green colour. At the tops of the stalks stand umbels of white flowers, after which come small and blackish seed: the root is long and whitish, abiding long. Our lesser burnet-saxifrage hath much finer leaves than the former, very small, and set one against another, deeply jagged about the edges, and of the same colour as the former. The umbels of the flowers are white, and the seed very small; and so is the root, being also somewhat hot to the taste.

PLACE. These grow in most meadows in England, and are to be found concealed in the grass scarcely to be discerned.

TIME. They flower about July, and the seed is ripe in August.

GOVERNMENT AND VIRTUES. These herbs are both of the Moon. The faxifrages are as hot as pepper; and Tragus saith, by his experience, they are more wholesome. They have the same properties that the parfleys have; but, in provoking urine, and easing the wind and cholic, are much more effectual. The roots or seed, being used either in powder, or in decoction, or any other way, help to break and void the stone in the kidneys, to digest cold, viscous, and tough, phlegm in the stomach, and are a most special remedy against all kind of venom. Castoreum, being boiled in the distilled water hereof, is good to be given to those that are troubled with cramps and convulsions. Some make the seed into comfits, as they do caraway-feed, which are effectual to all the purposes aforesaid. The juice of the herb, dropped into the most grievous wounds of the head, drieth up their moisture and healeth them quickly. Some women use the distilled water, to take away spots or freckles in the face or any parts of the body: and to drink the same, sweetened with sugar, for all the purposos aforesaid.

### S C A B I O U S. SCABIOSA.

DESCRIPTION. THE common field scabious groweth up with many hairy, soft, whitish-green, leaves, some whereof are but very little if at all jagged on the edges, others very much rent and torn on the sides, and have threads in them, which, upon the breaking, may be plainly seen; from among which rise up divers hairy green stalks, three or four feet high, with such-like hairy green leaves on them, but more deeply and finely divided, branched forth a little. At the tops, which are naked and bare of leaves for a good space, stand round heads of flowers, of a pale bluish colour, set together in a head, the outermost whereof are larger than the inward, with many threads also in the middle, somewhat flat at the top, as the head with seed is likewise. The root is great, white, and thick, growing down deep in the ground, and abideth many years.

There is another sort of field-scabious, different in nothing from the former, but only that it is smaller.

The corn scabious differeth little from the first, but that it is greater, and the flowers more declining to purple; and the root creepeth under the surface of the earth, and runneth not deep in the ground as the first doth.

PLACE. The first groweth most usually in meadows, especially about London every where. The second in some of the dry fields near London, but not so plentiful as the former. The third in the standing corn, or fallow fields, and the borders of such-like fields.

TIME. They flower in June and July, and some abide flowering until it be late in August, and the seed is ripe in the mean time.

There

There are many other sorts of scabious, but those here described are most familiar with us; the virtues both of these and the red being much alike, you will take them as followeth.

**GOVERNMENT AND VIRTUES.** Mercury owns the plant. Scabious is very effectual for all sorts of coughs, shortness of breath, and all other diseases of the breast and lungs, ripening and digesting cold phlegm and other tough humours, voiding them by coughing and spitting. It ripeneth also all sorts of inward ulcers and imposthumies, the pleurisy also, if the decoction of the herb, dry or green, be made in wine, and drunk for some time together. Four ounces of the clarified juice of scabious, taken in the morning fasting, with a dram of Mithridate or Venice treacle, freeth the heart from any infection of pestilence, if after the taking of it the party perspire two hours in bed. The green herb, bruised, and applied to any carbuncle or sore, is found, by certain experience, to dissolve or break it in three hours space. The same decoction also, drunk, helpeth pains and stiches in the sides. The decoction of the roots, taken for forty days together, or a dram of the powder of them taken at a time in whey, doth (as Mathiolus saith) wonderfully help those that are troubled with running or spreading scabs, tetterers, or ringworms, even though they proceed of the venereal disease. The juice, or decoction, drunk, helpeth also scabs and breakings-out of itch and the like. The juice, made up into an ointment, is effectual for the same purpose. The same also helpeth all inward wounds, by the drying, cleansing, and healing, quality therein. A syrup made of the juice and sugar, is very effectual to all the purposes aforesaid, and so is the distilled water of the herb and flowers made in due season; especially to be used when the green herb is not in force to be taken. The decoction of the herb and roots, outwardly applied, doth wonderfully help all sorts of hard or cold swelling in any part of the body, and is as effectual for any shrunk sinew or vein. The juice of scabious made up with the powder of borax and camphire, cleanseth the skin of the face or other parts of the body, not only from freckles and pimples, but also from morphew and leprosy. The head being washed with the same decoction, it cleanseth it from dandriff, scurf, sores, itches, and the like, being used warm. Tents, dipped in the juice or water thereof, not only heal green wounds, but old sores and ulcers also. The herb bruised, and applied, doth in a short time loosen and draw forth any splinter, broken bone, arrow-head, or other thing, lying in the flesh.

### S C U R V Y - G R A S S. COCHLEARIA.

**DESCRIPTION.** OUR ordinary English scurvy-grass hath many thick leaves, more long than broad, and sometimes longer and narrower; sometimes smooth

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on the edges, and sometimes a little waved; sometimes plain, smooth, and pointed, sometimes a little hollow in the middle, and round-pointed, of a fat green, and sometimes a bluish, colour, every one standing by itself upon a long footstalk, which is brownish or greenish also, from among which rise small slender stalks, bearing a few leaves thereon like the other, but longer and less for the most part; at the tops whereof grow many whitish flowers with yellow threads in the middle, standing about a green head which becometh the seed-vessel. The seed is reddish, tasting somewhat hot: the root is composed of many white strings, which stick deeply in the mud, wherein it chiefly delighteth; yet it will grow in upland and dry grounds; and tasteth a little brackish, or salt, even there, but not so much as where it hath salt water to feed upon.

PLACE. It groweth all along the Thames side, on the Essex and Kentish shores, from Woolwich round about the sea-coasts to Dover, Portsmouth, and even to Bristol, where it is in plenty; the other, with round leaves, groweth in the marshes in Holland in Lincolnshire, and other places of Lincolnshire by the sea-side.

2. Dutch scurvy-grass is most known and frequent in gardens, and hath divers fresh, green, and almost round, leaves, rising from the root, not so thick as the former, yet in some rich ground very large, not dented about the edges, nor hollow in the middle, every one standing on a long footstalk; from among these rise up divers long slender weak stalks, higher than the former, and with more white flowers, which turn into smaller pods, and smaller brownish seed, than the former: the root is white, small, and thready: the taste of this is not salt at all, but hot, aromatical, and spicy.

TIME. It flowereth in April or May, and the seed is ripe soon after.

GOVERNMENT AND VIRTUES. It is an herb of Jupiter. The English scurvy-grass is more used for its salt taste, which doth somewhat open and cleanse; but the Dutch-scurvy-grass is of better effect, and chiefly used by those that have the scurvy, especially to purge and cleanse the blood, the liver, and the spleen, for all which diseases it is of singular good effect, by taking the juice in the spring every morning fasting in a cup of drink. The decoction is good for the same purpose, and the herb tinned up in new drink, either by itself, or with other things, openeth obstructions, evacuateth cold clammy and phlegmatic humours both from the liver and the spleen, wasting and consuming both the swelling and hardness thereof, and thereby bringing to the body a more lively colour. The juice also helpeth all foul ulcers and sores in the mouth, if it be often gargled therewith; and, used outwardly, it cleanseth the skin from spots, marks, or scars.

## SELF-HEAL. PRUNELLA.

**NAMES.** IT is called prunel, carpenter's herb, hook-heal, and sickle-wort.

**DESCRIPTION.** The common self-heal is a small, low, creeping, herb, having many small roundish-pointed leaves, somewhat like the leaves of wild mints, of a dark green colour, without any dents on the edges, from among which rise divers small leaves up to the tops, where stand brownish spiked heads, of many small brownish leaves like scales and flowers set together, almost like the head of cassidony, which flowers are gaping, and of a bluish purple, or more pale below, in some places sweet, but not so in others. The root consists of many strings or fibres downward, and spreadeth strings also, whereby it increaseth. The small stalks, with the leaves, creeping upon the ground, shoot forth fibres taking hold of the ground, whereby it is made a great tuft in a short time.

**PLACE.** It is found in woods and fields every where.

**TIME.** It flowereth in May, and sometimes in April.

**GOVERNMENT AND VIRTUES.** This is an herb of Venus. It is a special herb for inward and outward wounds: take it inwardly in syrups for inward wounds; outwardly, in unguents and plasters, for outward. As self-heal is like bugle in form, so also in the qualities and virtues, serving for all the purposes whereto bugle is applied, with good success, either inwardly or outwardly. If it be accompanied with bugle, sanicle, and other the like wound-herbs, it will be the more effectual; and to wash or inject into ulcers, in the parts outwardly, where there is cause to repress the heat and sharpnes of humours flowing to any sore, ulcer, inflammation, swelling, or the like; or to stay the flux of blood in any wound or part; this is used with good success; as also to cleanse the foulnes of sores, and cause them more speedily to be healed. It is a good remedy for green wounds, to close the lips of them, and to keep the place from any further inconvenience. The juice thereof, used with oil of roses, to anoint the temples and forehead; is very effectual to remove the head-ach; and the same, mixed with honey of roses, cleanseth and healeth all ulcers in the mouth and throat.

## SERVICE-TREE. SORBUS.

IT is so well known in the places where it grows, that it needeth no description.

**TIME.** It flowereth before the end of May, and the fruit is ripe in October.

**GOVERNMENT AND VIRTUES.** Services, when they are mellow, are fit to be taken to stay fluxes, scowering, and castings, yet less than medlars. If they

be dried before they be mellow, and kept all the year, they may be used in decoction for the said purpose, either to drink, or to bathe the parts requiring it; and are profitably used in that manner to stay the bleeding of wounds. The service-tree is under the dominion of Saturn.

### SHEPHERDS PURSE. THLASPI.

**NAMES.** IT is also called shepherds scrip, shepherds pouch, toy-wort, pick-purse, and case-weed.

**DESCRIPTION.** The root is small, white, and perisheth every year. The leaves are small and long, of a pale green colour, and deeply cut on both sides: amongst which springeth up a stalk which is small and round, containing small leaves upon it even to the top. The flowers are white, and very small; after which come the little cases which hold the seed, which are flat, almost in the form of a heart.

**PLACE.** They are frequent in Great Britain, commonly by the paths-side.

**TIME.** They flower all the summer long; nay, some of them are so fruitful, that they flower twice a-year.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Saturn, and of a cold, dry, and binding, nature. It stops all fluxes of blood, caused either by inward or outward wounds; as also flux of the belly, bloody flux, and spitting of blood; being bound to the wrists and the soles of the feet, it helps the yellow jaundice. The herb, being made into a poultice, helps inflammations and St. Anthony's fire; the juice, being dropped into the ears, helps pains and noisces therein. A good ointment may be made of it for all wounds, especially wounds in the head.

### S M A L L A G E. APIUM.

THIS also is very well known, and therefore I shall not trouble the reader with any description thereof.

**PLACE.** It groweth naturally in wet and marshy grounds; but, if it be sown in gardens, it there prospereth very well.

**TIME.** It abideth green all the winter, and feedeth in August.

**GOVERNMENT AND VIRTUES.** It is an herb of Mercury. Smallage is hotter, drier, and much more medicinable, than parsley, for it much more openeth obstructions of the liver and spleen, rarefieith thick phlegm, and cleanseth it and the blood withal. It provoketh urine, and is good against the yellow jaundice. It is effectual against tertian and quartan agues, if the juice thereof be taken; but especially made into a fyrup. The juice also, put to honye of roses, and barley-water, is very good

to

to gargle the mouth and throat of those that have sores and ulcers in them, and will quickly heal them: the same lotion also cleanseth and healeth all other foul ulcers and cancers elsewhere. The seed is especially used to break and expel wind, to kill worms, and to help a stinking breath. The root is effectual to all the purposes aforesaid, and is held to be stronger in operation than the herb, but especially to open obstructions, and to rid away anyague, if the juice thereof or the decoction be taken in wine. All the purposes of this herb are likewise answered by the Solar Tincture, which imbibes its occult property.

#### S O P E - W O R T ,   O R   B R U I S E - W O R T .   S A P O N A R I A .

**DESCRIPTION.** The root creepeth under ground far and near, with many joints therein, of a brown colour on the outside, and yellowish within, shooting forth in divers places many weak round stalks, full of joints, set with two leaves a-piece at every one of them on the contrary side, which are ribbed somewhat like that of plantane, and fashioned like the common field white campion leaves, seldom having any branches from the sides of the stalk, but set with divers flowers at the top, standing in long husks like the wild campions, made of five leaves each, round at the ends, and a little dented in the middle, of a pale rose-colour, almost white, sometimes deeper, and sometimes paler, of a reasonable good scent.

**PLACE.** It groweth wild in low and wet grounds in many parts of England, by the brooks and sides of running waters.

**TIME.** It flowereth usually in July, and so continueth all August and part of September.

**GOVERNMENT AND VIRTUES.** Venus owns it. The country people in many places do use to bruise the leaves of sope-wort, and lay it to their fingers, hands, or legs, when they are cut, to heal them. Some say it is diuretic, and expels gravel and stone in the kidneys; and is also good to void hydroical waters, thereby to cure the dropsy, tympany, or an impoverished state of the blood.

#### S O R R E L .   R U M E X .

OUR ordinary forrel, which groweth in gardens, and also wild in the fields, is so well known, that it needeth no description.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Venus. Sorrel is prevalent in all hot diseases, to cool any inflammation and heat of blood in agues pestilential or choleric, or other fickness, and fainting, arising from heat, and to refresh the spirits overspent with the violence of furious or fiery fits of agues, to quench thirst, and procure an appetite in fainting or decayed stomachs; for it

resisteth the putrefaction of the blood, killeth worms, and is a cordial to the heart; for which the seed is more effectual, being more drying and binding, and thereby stayeth the hot humours in the bloody flux, or flux of the stomach. The roots also, in a decoction, or in powder, are effectual for all the said purposes. Both roots and seed, as well as the herb, are held powerfully to resist the poison of the scorpion. The decoction of the roots is taken to help the jaundice, and to expel the gravel and stone. The decoction of the flowers made with wine, and drunk, helpeth the black jaundice, as also the inward ulcers of the body or bowels. A syrup made with the juice of sorrel and fumitory is a sovereign help to kill those sharp humours that cause the itch. The juice thereof with a little vinegar may be used outwardly for the same cause, and is also profitable for tetter, ring-worms, &c. It helpeth also to discuss the kernels of the throat; and the juice, gargled in the mouth, helpeth the sores therein. The leaves wrapt up in a colewort-leaf, and roasted under the embers, and applied to a hard imposthume, blotch, bile, or plague-sore, both ripen and break it. The distilled water of the herb is of much good use for all the purposes aforesaid; and the leaves eaten in a salad are excellent for the blood.

#### WOOD-SORREL. OXALIS.

**DESCRIPTION.** THIS groweth low upon the ground, having a number of leaves coming from the root, made of three leaves like trefoil, but broad at the ends, and cut in the middle, of a faint yellowish-green colour, every one standing on a long footstalk, which at their first coming up are close folded together to the stalk; but, opening afterwards, are of a fine sour relish, and yield a juice which will turn red when it is clarified, and maketh a most dainty clear syrup. Among these leaves riseth up divers slender weak footstalks, with every one of them a flower at the top, consisting of five small pointed leaves, star-fashion, of a white colour in most places, and in some dashed over with a small shew of bluish on the back-side only. After the flowers are past, follow small round heads, with small yellowish seed in them. The roots are nothing but small strings fastened to the end of a small long piece, all of them being of a yellowish colour.

**PLACE.** It groweth in many places of England; in woods and other places not too much open to the sun.

**TIME.** It flowereth in April and May.

**GOVERNMENT AND VIRTUES.** Venus owns it. Wood-sorrel serveth to all the purposes that the other sorrels do, and is more effectual in hindering the putrefaction of blood, and ulcers in the mouth and body, and in cooling and tempering

heats and inflammations, to quench thirst, to strengthen a weak stomach, to procure an appetite, to stay vomiting, and is very excellent in any contagious sickness, or pestilential fever. The syrum made of the juice is effectual in all the cases aforesaid, and so is the distilled water of the herb. Sponges or linen cloths wet in the juice, and applied outwardly to any hot swellings or inflammations, do much cool and help them. The same juice taken, and gargled in the mouth, for some time, and frequently repeated, doth wonderfully help a stinking cancer or ulcer therein. It is of singular service for wounds in any part of the body, to stay the bleeding, and to cleanse and heal the wounds, and helpeth to stay any hot fluxions into the throat or lungs, and cleanseth the viscera.

#### SOW-THISTLES. SONCHUS.

SOW-THISTLES grow in every part of this kingdom, and are so well known, that they need no description.

PLACE. They grow in our gardens and manured grounds, and sometimes by old walls, the path sides of fields and highways.

GOVERNMENT AND VIRTUES. This and the former are under the influence of Venus. Sow-thistles are cooling, and somewhat binding, and are very fit to cool a hot stomach, and to ease the gnawing pains thereof. The herb, boiled in wine, is very helpful to stay the dissolution of the stomach: and the milk that is taken from the stalks when they are broken, given in drink, is beneficial to those that are short-winded. Pliny saith, that it hath caused the gravel and stone to be voided by urine, and that the eating thereof helpeth a stinking breath. The said juice, taken in warm drink, helpeth the strangury. The decoction of the leaves and stalks causeth abundance of milk in nurses, and their children to be well-coloured, and is good for those whose milk doth curdle in their breasts. The juice boiled or thoroughly heated with a little oil of bitter almonds in the peel of a pomegranate, and dropped into the ears, is a sure remedy for deafness, ringing, and all other diseases in them. The herb bruised, or the juice, is profitably applied to all hot inflammations in the eyes, or wherefsoe'er else, and for wheals, blisters, or other the like eruptions, or heat, in the skin; also for the heat and itching of the hemorrhoids, and the heat and sharpness of humours in the secret parts of man or woman. The distilled water of the herb is not only effectual for all the diseases aforesaid, to be taken inwardly with a little sugar, (which medicine the daintiest stomach will not refuse,) but outwardly, by applying cloths or sponges wetted therein. It is good for women to wash their faces therewith, to clear the skin, and to give a lustre thereto. The virtue of this

plant

plant lies in its milky juice, which is of great value in difficulty of hearing. This often arises from obstructing wax, often from inflammation, and sometimes from both these causes conjoined.

### SOUTHERNWOOD. ARTEMISIA.

SOUTHERNWOOD is so well known to be an ordinary inhabitant in almost all gardens, that it needeth no description.

TIME. It flowereth for the most part in July and August.

GOVERNMENT AND VIRTUES. It is a Mercurial plant, worthy of more esteem than it hath. Dioscorides saith, that the feed bruised, heated in warm water, and drunk, helpeth those that are troubled with the cramps or convulsions of the sinews, the sciatica, or difficulty in making water. The same taken in wine is an antidote, or counter-poison, and driveth away serpents and other venomous creatures; as also the smell of the herb, being burnt, doth the same. The oil thereof, anointed on the back-bone before the fits of agues come, preventeth them; it taketh away inflammations in the eyes, if it be put with some part of a roasted quince, and boiled with a few crumbs of bread, and applied. Boiled with barley-meal, it taketh away pimples, pushes, or wheals, that rise in the face or other part of the body. The feed, as well as the dried herb, is often given to kill worms in children. The herb bruised helpeth to draw forth splinters and thorns out of the flesh. The ashes thereof dry up and heal old ulcers that are without inflammation, although by the sharpnes thereof it makes them smart. The ashes, mingled with old salad-oil, help those that have their hair fallen, and are bald, causing the hair to grow again, either on the head or beard. Durantes saith, that the oil made of southernwood, and put among the ointments that are used against the French disease, is very effectual, and likewise killeth lice in the head. The distilled water of the herb is said to help them much that are troubled with the stone, as also for the diseases of the spleen and mother. The Germans commend it for a singular wound-herb, and therefore call it *stab-wort*. It is held by all writers, ancient and modern, to be more offensive to the stomach than wormwood, which has thrown it into disrepute.

### SPIGNELL. ATHAMANTA.

DESCRIPTION. THE roots of common spignel do spread much and deep in the ground, many strings or branches growing from one head, which is hairy at the top, of a blackish brown colour on the outside and white within, of a pleasant smell and aromatic taste, whence rise sundry long stalks of fine cut leaves like hairs, smaller than

than dill, set thick on both sides of the stalk, and of a good scent. Among these leaves rise up round stiff stalks, with a few joints and leaves, and at the tops an umbel of fine pure white flowers, at the edges whereof sometimes will be seen a show of reddish-blue colour, especially before they be full blown, and are succeeded by small somewhat round seed, bigger than the ordinary fennel, and of a browner colour, divided into two parts, and crested on the back, as most of the umbelliferous seeds are.

**PLACE.** It groweth wild in Lancashire, Yorkshire, and other northern countries; and is also planted in gardens.

**GOVERNMENT AND VIRTUES.** It is an herb of Venus. Galen saith, the roots of spignel are available to provoke urine; but, if too much thereof be taken, it causeth head-ach. The roots boiled in wine or water, and drunk, help the strangury and stoppings of the urine, the wind, swellings, and pains, in the stomach, and all joint-achs. If the powder of the roots be mixed with honey, and the same taken as a licking medicine, it breaketh tough phlegm, and drieth up the rheum that falleth on the lungs. The roots are accounted very effectual against the stinging or biting of any venomous creature, and is one of the ingredients in mithridate and other antidotes for the same.

#### SPLEEN-WORT, OR CETRACH. *ASPLENIUM.*

**DESCRIPTION.** The smooth spleen-wort, from a black, thready, and bushy, root, sendeth forth many long single leaves, cut in on both sides into round dents, almost to the middle, which is not so hard as that of polypody, each division being not always set opposite unto the other, but between each, smooth, and of a light green on the upper side, and a dark yellowish roughness on the back, folding or rolling itself inward at the first springing up.

**PLACE.** It groweth as well upon stone walls as moist and shadowy places about Bristol and the other the west parts plentifully; as also on Framlingham-castle in Suffolk, Beckonsfield church in Berkshire, at Stroud in Kent, and elsewhere; and abideth green all the winter.

**GOVERNMENT AND VIRTUES.** Saturn owns it. It is generally used against infirmities of the spleen; it helpeth the strangury, and wasteth the stone in the bladder, and is good against the yellow-jaundice and the hiccough; but the use of it in women hindereth conception. Mathiolus saith, that, if a dram of the dust, that is on the back-side of the leaves, be mixed with half a dram of amber in powder, and taken with the juice of purlane or plantane, it will help the running

of the reins; and that the herb or root, being boiled and taken, helpeth all melancholic diseases, and those especially that arise from the French disease. Camerarius saith, that the distilled water thereof, being drunk, is very effectual against the stone; and that the lye, made of the ashes thereof, being drunk for some time together, helpeth spleenetic persons; it is used in outward remedies for the same purpose.

### S T A R - T H I S T L E. CENTAUREA.

**DESCRIPTION.** The common star-thistle hath divers long and narrow leaves lying next the ground, cut or torn on the edges, somewhat deeply, into many almost even parts, soft or a little woolly all over the green; among which rise up divers weak stalks parted into many branches, all lying or leaning down to the ground, so that it seemeth a pretty bush, set with many divided leaves up to the tops, where severally stand long and small whitish-green heads, set with sharp and long white pricks, (no part of the plant being else prickly,) which are somewhat yellowish: out of the middle whereof riseth the flower, composed of many small reddish-purple threads; and in the heads, after the flowers are past, come small whitish round seed, lying down as the others do. The root is small, long, and woody, perishing every year, and rising again of its own sowing.

**PLACE.** It groweth wild in the fields about London in many places.

**TIME.** It flowereth early, and seedeth in July, and sometimes in August.

**GOVERNMENT AND VIRTUES.** This, like almost all thistles, is under Mars. The seed of this star-thistle made into powder, and drunk in wine, provoketh urine, and helpeth to break the stone, and expel it. The root in powder given in wine, is good against the plague, or pestilence: and, drunk in the morning fasting for some time together, is very profitable for a fistula in any part of the body. Baptista Sardus doth much commend the distilled water, to help the French disease, to open obstructions of the liver, and cleanse the blood from corrupted humours: and it is profitably given against quotidian or tertian agues.

### S T R A W B E R R I E S. FRAGARIA.

THESE are so well known through this land, that they need no description.

**TIME.** They flower in May ordinarily, and the fruit is ripe shortly after.

**GOVERNMENT AND VIRTUES.** Venus owns the herb. Strawberries, when they are green, are cold and dry; but when they are ripe they are cold and moist. The berries are excellent good to cool the liver, the blood, and the spleen, or a

hot choleric stomach; to refresh and comfort the fainting spirits, and to quench thirst. They are good also for other inflammations, yet it is not amiss to refrain from them in a fever, lest by their putrefying in the stomach they increase the fits. The leaves and roots boiled in wine or water, and drunk, do likewise cool the liver, and blood, and assuage all inflammations in the reins and bladder, provoke urine, and allay the heat and sharpness thereof; the same also, being drunk, stay the bloody-flux, and help the swellings of the spleen. The water of the berries, carefully distilled, is a sovereign remedy and cordial in the pacification of the heart; and is good for the yellow jaundice. The juice dropped into foul ulcers, or the decoction of the herb and root, doth wonderfully cleanse and help to cure them. Lotions and gargles for sore mouths, or ulcers therein; or elsewhere, are made with the leaves and roots, which are also good to fasten loose teeth, and to heal spongy foul gums. It helpeth also to stay catarrhs or fluxions of rheum into the mouth, throat, teeth, or eyes. The juice, or water, is good for hot and red inflamed eyes; it is also of excellent property for all pushes, wheals, and other breakings forth of hot and sharp humours, in the face and hands, or other parts of the body, to bathe them therewith; and to take away any redness in the face, or spots or other deformities in the skin, and to make it clear and smooth. Some use this medicine: Take so many strawberries as you shall think fitting, and put them into a distillatory, or body of glafs, fit for them; which, being well closed, set in a bed of horse-dung for twelve or fourteen days, and afterwards distil it carefully, and keep it for your use. It is an excellent water for hot inflamed eyes, and to take away any film or skin that beginneth to grow over them, and for such other defects in them as may be helped by any outward medicine.

### S U C C O R Y. CICHORIUM.

**DESCRIPTION.** The garden succory hath longer and narrower leaves than endive, and more cut in and torn at the edges; and the root abideth many years; it beareth also many blue flowers like endive, and the seed is hardly distinguishable from the seed of the smooth or ordinary endive.

**GOVERNMENT AND VIRTUES.** It is an herb of Jupiter. Garden-succory, as it is more dry and less cold than endive, so it openeth more. A handful of the leaves or roots boiled in wine or water, and a draught thereof drunk fasting, driveth forth choleric and phlegmatic humours; openeth obstructions of the liver, gall, and spleen: helpeth the yellow-jaundice, the heat of the reins, and of the urine; the dropfy also, and those that have an evil disposition in their bodies by reason of long sickness, evil diet, &c. which the Greeks call *cachexia*. A decoction

tion thereof made with wine, and drunk, is very effectual against long lingering agues; and a dram of the seed in powder drunk in wine before the fit of an ague helpeth to drive it away. The distilled water of the herb and flowers (if you can take them in time) is good for hot stomachs, and in agues, either pestilential or of long continuance; for swoonings, and the passions of the heart; for the heat and head-ach in children, and for the disorders of the blood and liver. The said water, or the juice, or the bruised leaves, applied outwardly, allayeth swellings, inflammations, St. Anthony's fire, pushes, wheals, and pimples, especially used with a little vinegar, as also to wash pestiferous sores. The said water is very effectual for sore eyes that are inflamed with redness, and for nurses' breasts that are pained by abundance of milk.

#### STONECROP, OR SMALL HOUSELEEK. SEDUM.

**DESCRIPTION.** IT groweth with divers trailing branches upon the ground, set with many thick, fat, roundish, whitish, leaves, pointed at the ends; the flowers stand many of them together, somewhat loosely; the roots are small, and run creeping under the ground.

**PLACE.** It groweth upon the stone walls and mud walls, upon the tiles of houses and penthouses, and amongst rubbish and in most gravelly places.

**TIME.** It flowereth in June and July, and the leaves are green all the winter.

**GOVERNMENT AND VIRTUES.** It is under the dominion of the Moon, cold in quality, and something binding, and therefore very good to stay defluxions, especially such as fall upon the eyes: it stops bleeding both inward and outward, helps cankers and all fretting sores and ulcers; it abates the heat of choler, thereby preventing diseases thence arising from choleric humours. It expels poison, resisteth pestilential fevers, and is exceeding good also for tertian agues. It is so harmless an herb, you can scarcely use it amiss. Being bruised and applied to the place, it helps the king's-evil, and any other knots, or kernels, in the flesh: as also the piles.

#### S-A R S A P A R I L L A. SMILAX.

THIS is reckoned amongst the sorts of prickly bindweeds, of which there are two sorts, and this sarsaparilla brought from the West Indies makes the third kind. Their names with their descriptions severally follow.

**DESCRIPTION.** 1. Prickly bindweed with red berries, called in Latin *smilax aspera fructu rubro*. This groweth up with many branches, wherewith it windeth about trees and other things, set with many crooked pricks or thorns like a bramble, all the

the whole length, binding this way and that in a seemly proportion; at every joint it boweth or bendeth itself, having a somewhat broad and long leaf thereat, standing upon a long footstalk, and is broad at the bottom, with two forked round ends, and then groweth narrower unto the point; the middle rib on the back side of most of them having many small thorns or pricks, and also about the edges; the lowest being the largest, and growing smaller to the top, smooth, and of a fair green colour, and sometimes spotted with white spots. At the joints with the leaves also come forth tendrils, like a vine, whereby it winds itself. The flowers stand at the tops of the branches at three or four joints, many breaking forth into a cluster, which are white, composed of six leaves each, star-fashion, and sweet in scent; after which come the fruit, which are red berries when they are ripe, of the bigness of asparagus-berries or small grapes, and in some less, wherein are contained sometimes two or three hard black stones, like those of asparagus. The root is slender, white, and long, in hard dry grounds not spreading far, but in the looser and moister places running down into the ground a pretty way, with divers knots and joints.

2. Prickly bindweed with black berries, *smilax aspera fructu nigro*. This other prickly bindweed groweth like the former, the branches being joined in like manner, with thorns on them, but not climbing like the former; the leaves are somewhat like it, not having those forked ends at the bottom of every leaf, but almost wholly round, and broad at the bottom, of a darker green colour also, seldom having any thorns or pricks either on the back or edges of the leaves, with tendrils like a vine also: the flowers come forth in the same manner, and are star-fashion, consisting of six leaves like the other, of an incarnate or blush colour, with a round red umbone in the middle of every one, which is the beginning of the berry, which when it is ripe will be black, being more fappy or fleshy than the other, with stones or kernels within them like unto it: the roots hereof are bigger and fuller than the former for the most part, and spread further under the ground.

4. Sarsaparilla of America, *smilax aspera Peruviana*. The sarsaparilla that cometh from America into Spain hath been seen fresh, even the whole plant, and hath been verified in all things to resemble the prickly bindweed, and in nothing different from it. But certainly the plant of sarsaparilla that groweth in Peru and the West Indies is a peculiar kind of itself, differing from the *smilax aspera* as mechoacan doth from our briony: this doth wind itself about poles or any thing else it can lay hold on to climb on; the branches have crooked prickles growing on them as the *smilax aspera* hath, but fewer and not so sharp; it hath very green leaves like those of bindweed, but longer, and cornered like

ivy-leaves, ending in a long point: the flowers are said to be very great and white, every one as big as a middle-sized dish, which, opening in the morning, fadeth at night; which occasioned the Spaniards to call the whole plant *buenos noches*, that is, good night. Gerrard describes the sarsaparilla to be the roots of a shrub, having leaves like ivy; but saith nothing of the flowers or fruit, which it may be believed were not then discovered.

PLACE AND TIME. The two first grow in Italy, Spain, and other warm countries, whether continent or isles, throughout Europe and Asia. The third is found only in the West Indies; the best is said to come from the Honduras, others not so good from other places, as the fertility or barrenness of the ground, and the temperature of the climate, afford it; and it hath ripe berries early in hot countries,

GOVERNMENT AND VIRTUES. These are all plants of Mars, of an healing quality, howsoever used; Dioscorides saith, that both leaves and berries, being drunk before or after any deadly poison is taken, are a remedy thereagainst, serving to expel it. It is said also, that if to a new-born child some of the juice of the berries hereof be given, it shall not be hurt by poison ever after; it is given as an antidote against all sorts of poison and venomous things: if twelve or fifteen of the berries, being beaten to powder, be given in wine, it procureth urine, when it is stopped; the distilled water of the flowers, being drunk, worketh the same effect, and cleanseth the reins, and assuageth inward inflammations. If the eyes be washed therewith, it taketh away all heat and redness in them; and, if the sores of the legs be washed therewith, it healeth them thoroughly. The true sarsaparilla is held generally not to heat, but rather to dry the humours; yet it is easily perceived, that it doth not only dry the humours, but wafteth them away, by a secret and hidden property therin; much whereof is performed by sweating, which it promoteth very effectually. It is much used in many kinds of diseases; as in all cold fluxes from the head and brain, rheums, and catarrhs, as also in all cold griefs of the stomach, and expelleth wind very powerfully. It helpeth not only the French disease, but all manner of aches in the sinews, or joints; all running sores in the legs, all phlegmatic swellings, tetter, or ringworms, and all manner of spots and foulness of the skin; it is not proper to be given to those whose livers are over hot, or to such as have agues. In former times it was used beaten to powder and so drunk: others used to boil it until it became tender, which, being beaten or broken, was afterwards strained into the decoction, making a kind of thick drink like cream. Some others, and that most usually, boiled it in water to the half, or the consumption of the third part, as they would have it stronger or weaker, and that either by itself or with other things proper for the disease it was intended for; and others also put it amongst other things for drink.

An excellent diet-drink may be made as follows: Take lignum vitæ, which is guaiacum, nine ounces; bark of the same two ounces, sassafras one ounce, sarsaparilla four ounces, juniper-berries one ounce; boil them in two ounces of fountain-water to the consumption of half: add to the strained liquor coriander-seeds four drams; cinnamon and liquorice, each two drams. This may be taken as an ordinary drink for all the diseases before-mentioned.

S A U N D E R S. *SANTALUM. PTEROCARPUS.*

**KINDS AND DESCRIPTION.** IN our shops, for phisical use, we have three sorts of saunders, whereof the white and yellow (*Santalum*) are sweet woods, but the yellow is the sweetest; the red (*Pterocarpus*) hath no scent. The saunders-tree groweth to be as big as a walnut-tree, having fresh green leaves like the mastic-tree, and darkish-blue flowers, the fruit being like cherries for the size, but without any taste; black when they are ripe, and quickly falling away. The wood itself is without scent, as it is said, while it is living and fresh, and smelleth sweet only when it is dry. The white and the yellow woods are so hard to be distinguished before that time, that none but those Indians that usually fell those trees do know their difference beforehand; and can tell which will prove better than others: the chiefest part, and smelling sweetest, is the heart of the wood. They are distinguished by these names, *santalum album, citrinum, et rubrum.*

**GOVERNMENT AND VIRTUES.** All the saunders are under the solar regimen: they are cooling and cordial, and used together in sundry cordial medicines; but the white and the yellow are the more cordial and comfortable, by reason of their sweetness; and the red more cooling and binding; which quality neither of the other are without, though in a less proportion. The red is often used to stay thin rheum falling from the head, and to cool hot inflammations, hot gouts, and in hot agues to cool and temper the heat; but the white and yellow are both cordial and cephalic, applied with rose-water to the temples, procuring ease in the head-ach, and are singular good for weak and fainting stomachs through heat, and in the hot fits of agues. They are very profitably applied in fomentations for the stomach, spirits, and palpitations of the heart, which also do comfort and strengthen them, and temperate the melancholy humour, and procure alacrity and mirth, which quality is attributed to the yellow more than the white.

S C A M M O N Y. *CYNANCHUM.*

**DESCRIPTION.** THE true-scammony hath a long root of a dark ash-colour on the outside, and white within, and of the bigness of an arm, with a pith in

the middle thereof, and many fibres thereat, from whence arise many long, round, green, branches, winding themselves like a bindweed about stakes and trees, or any other thing that stands next it, unto a good height, without any clasping tendrils, like the true or wild vine: from the joints of the branches come forth the leaves, every one by itself, upon short footstalks, somewhat broad at the bottom, with two corners next thereto, and some also round; and then growing long and narrow to the end, being of a fair green colour, smooth, and somewhat shining. Towards the tops of the branches, at the joints with the leaves, come forth large whitish bell-flowers, with wide open brims and narrow bottoms, after which come round heads, wherein is contained three or four black seeds; if any part of this plant be broken, it yieldeth forth a milk, not hot, nor burning, nor bitter, yet somewhat unpleasant, provoking loathing, and almost casting.

**NAMES.** It is called *scammonia* both in Greek and Latin. The dried juice, which is most in use, is called also *scammoniacum* in the druggists and apothecaries shops, as also with most writers; and some call the plant so too. When it is prepared, that is, baked in a quince under the embers, or in an oven, or any other way, it is called *diagridium*.

**PLACE AND TIME.** Scammony groweth in Syria, and the farther eastern parts, where no frosts come in the winter; for where any frost comes it quickly perisheth, consequently it flourishes in hot climates only.

**GOVERNMENT AND VIRTUES.** This is a martial plant, and of a churlish nature, so that there had need be great care taken in the choice thereof, that only that be used in physic which is pure and without adulteration; which may be known if it be not heavy, or close compact together, but that it be moderately light, with some small holes or hollowness, here and there, therin; and that it be smooth and plain in the breaking, and not in grains or knots, or having small sticks or stones in it; somewhat clear and blackish, but not of a deadish, dark, or ill-favoured, colour; and that it may be made quickly into a very fine and white powder. It purgeth both phlegm, yellow choler, and watery humours, very strongly; but, if it be indiscreetly given, it will not only trouble the stomach more than any other medicine, but will also scour the guts, in working too powerfully, oftentimes unto blood, and oftentimes unto faintings and swoonings, and therefore is not fit to be given to any gentle or tender body. Mesue declarereth three several hurts or dangers that come to the body thereby, and the remedies of them: The first is, saith he, that it engendereth certain gnawing winds in the stomach, so much offending it, that it provoketh to vomit. To be baked therefore in a quince, and some parsley, fennel, or wild carrot feed,

feed, or galanga, mixed with it, is the remedy hereof. The next is, that it inflameth the spirits, by the overmuch sharpness or fiercenes therein; whereby it readily induceth fevers, especially in those that are subject to obstructions, and replete with putrid humours; which inconveniences are taken away by putting those things into your decoctions that do cool and quench the heat thereof; and such are the mucilage of the seeds of psyllium, or fleawort; prunes boiled, or rather the pulp of them, the juice, or the julep, or the water, of roses or violets; or if before the boiling thereof (that is the scammony) you steep it in the oil of roses, or violets, or in the juice of a quince, and mingle it with a little shumac or spodium. A third is, that, having a strong opening and drawing faculty, it causeth immoderate fluxes of the belly, by opening the mouth of the veins more than is fit: this harin is also taken away by mixing astringent and restraining things with it, such as mastic, and especially yellow, myrobolans, and quinces, or the juice of them. Again, it rafeth the entrails and guts, by reason of the sharp juice wherewith it abounds, and by which it procureth pains therein; this danger is remedied if moist, fat, and slippery, things be used with it, as gum tragacanth, bdellium, and oil of almonds and roses, as also the pulp of prunes made up with sugar, the mucilage of fleawort-seeds, mastic, and quinces, taken afterwards, and warm water last of all; all which cause it to pass the quicker from the stomach and bowels, and thereby prevent its doing harm. This fault is also helped if cold medicines as well as hot be mixed together to be given, thereby to yield help to the heart, liver, and stomach. Dioscorides saith, if the juice be applied to the womb, it destroyeth the birth, being mixed with honey and ox-gall; and rubbed on wheals, pimples, and pushes, takes them all away: and, boiled in vinegar, and anointed, takes away the leprosy, and outward marks in the skin, being dissolved in rose-water and vinegar, and the head moistened therewith, easeth the continual pains thereof. A dram or two of the roots of scammony purge in the same manner as the juice doth, if some of the things that are appointed therewith be given in it. The roots boiled in water, and made into a poultice, with barley-meal, easeth the sciatica, being laid thereon; it taketh away scurfs and scabs if they be washed with the vinegar wherein the roots have been boiled, and also healeth imposthumes,

## SEBESTEN, OR ASSYRIAN PLUM. CORDIA.

DESCRIPTION AND NAMES. THE sebesten-tree groweth not so high as the plum-tree. It is covered with a whitish bark; the branches are green, whereon

No. 24.

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grow

grow rounder, thicker, and harder, leaves. The blossoms are white, and consist of five leaves each, growing together on a long stalk, which afterwards turn into small berries, rather than plums, of a blackish-green colour when they are ripe, every one standing in a little cup, of a sweet taste, and glutinous or clammy substance, and a very thick skin; within which lieth a three-square hard stone, with a thick shell and a small kernel: these are gathered and laid in the sun, whereby they grow wrinkled; and so they are kept and brought to us in boxes.

### WILD SEBESTEN. CORDIA MYXA.

THE wild sebesten is in all things like the other, but that it groweth lower, much like unto a hedge-bush, and with smaller and thinner leaves. The flowers and fruit are like, but les.

In shops they have only the name of sebesten, but in Latin the tree is called *myxos*, *myxa*, and *myxaria*.

PLACE AND TIME. The first groweth in Syria, and is but planted in Egypt, whence they were brought into Italy in Pliny's time, and grafted on the service-tree, and do now grow in many places in their orchards. It is so tender that it will not endure the cold with us. The wild kind, as Alpinus saith, is natural in Egypt: they flower in May, and the fruit is ripe in September.

GOVERNMENT AND VIRTUES. This is a plant of Venus: the Arabians and Greeks hold that they open the body as much, or rather more, by reason of the mucilage in them, than the damask prunes: more however while they are green, and les when they are dry; yet the decoction of them, or the infusion of them in broth, although dried and taken whole, worketh effectually; which Fuschius denieth, and affirmeth that they are rather binding. They serve to cool any intemperate heat of the stomach and liver, and therefore are good in hot agues, and to purge choler, whereof they come. Mathiolus saith, that ten drams, or twelve at the most, of the pulp of sebestens taken from the skins and stone, work to as good purpose as the pulp of cassia fistula. They are very effectual also to lenify the hoarseness and roughness of the throat; they help the cough and wheezing of the lungs, and distillations upon them, by lenifying of the passages, and causing much phlegm to be voided. They also give ease to such as are troubled with pains in their sides, and those that are troubled with heat in their urine, and sharpnes thereof proceeding from choler or salt phlegm; they also drivo forth the long worms of the belly. There is a kind of birdlime made of these fruits by boiling them a little in water to take away the skins and stones, and afterwards boiling them more

to a consistence; the which (as saith Mathiolus) was used at Venice to catch birds; but Alpinus saith, they use it in Egypt as a plaster to dissolve hard tumours or swellings.

### SENNA. CASSIA. COLUTEA.

**DESCRIPTION.** THE true senna (Cassia) is said to grow in Arabia and Syria, and is transported from Alexandria to us. There is a bastard senna, which is kept in many gardens with us, commonly called *Colutea*, which is its Latin name.

**GOVERNMENT AND VIRTUES.** It is under the dominion of Mercury. The leaves of senna (which only are used) are hot near the first degree, and dry in the third; it is of a purging faculty, but leaveth a binding quality after the purging; it openeth obstructions, and cleanseth and comforteth the stomach, being corrected with annise-seed, caraway-seed, or ginger; it purgeth melancholy, choler, and phlegm, from the head and brain, lungs, heart, liver, and spleen, cleansing those parts of evil humours, a dram thereof taken in wine, ale, or broth, fasting; it strengthens the senses, and procureth mirth: it is also good in chronical agues, whether quartan or quotidian; it cleanseth and purifieth the blood, and causeth a fresh and lively habit of the body, and is a special ingredient in diet-drinks, and to make purging ale, to be taken to clarify and cleanse the blood. The bastard senna works very violently both upwards and downwards, offending the stomach and bowels.

### SYCAMORE-TREE. ACER.

**KINDS.** THERE are two sorts of this tree, the one bearing fruit from the body and greater arms of the tree only, the other upon stalks without leaves. The first is called in Latin *sycomorus ficus Egyptiaca*, the Egyptian fig-tree, and is the true sycamore-tree; those trees which are vulgarly called sycamores in England are a kind of maples.

**DESCRIPTION.** 1. This sycamore groweth to be a very great tree, bigger than the mulberry-tree, with large arms and branches, full of round and somewhat long leaves, pointed at the ends, and dented about the edges, very like the leaves of the mulberry-tree; but harder and rougher, like fig-leaves; this beareth small figs, or fruit, and no flower, differing in that from all other trees; for it bringeth forth the fruit out of the very body or trunk of the tree only, and the elder branches next to the body, and no where else; and are very like unto white or wild figs, and of the same bigness, but much sweeter, and without any kernels. The whole tree, and every part, abounding with milk, if the bark be but gently wounded; but, if it be

cut

cut too deep, it yieldeth no milk at all; which maketh it to bear three or four times a-year, new rising out of the places where the old grew. The root is folid, hard, and black, and will abide fresh long after it is felled.

2. The other sycamore is called *sycomorus altera, seu ficus Cypriæ*, the sycamore of Cyprus. This groweth to be as big as a plum-tree, or white poplar tree, the arms and branches bearing broad and somewhat-round leaves, like unto the elm, but very like unto the former; this beareth fuch-like fruit as figs, but smaller, which rise both from the body and the greater arms, but not as the former; but on certain stalks in branches, which rise by themselves without any leaves with them; and are as sweet as figs. They bear four times every year, but not unless they be slit, that the milk in them may come forth.

PLACE AND TIME. The first grows chiefly in Egypt, Syria, and Arabia, and other places adjacent; the other in Cyprus, Caria, Rhodes, and the neighbouring parts.

GOVERNMENT AND VIRTUES. These are under the particular influence of Venus. The fruit maketh the belly foluble, but by its overmuch moisture it troubles the stomach, and giveth but little nourishment. The milk that is taken from the tree by gently piercing the bark, and afterwards dried and made into troches, and kept in an earthen pot, hath a property to soften tumours, and dissolve them, and to folder and close together the lips of green wounds. The fruit itself, being applied as a plaster, worketh the same effect.

#### S P I K E N A R D. NARDUS.

IT is naturally an Indian plant, called *nardus Indica*; therefore I shall proceed to declare its virtues, not troubling you at all with its description.

VIRTUES. Spikenard is of a heating drying faculty, as faith Dioscorides; it is good to provoke urine, and easeth pains of the stone in the reins and kidneys, being drunk in cold water; it helps loathings, swellings, or gnawing, in the stomach, the yellow-jaundice, and such as are liver-grown. It is a good ingredient in mithridate and other antidotes against poison; to women with child it is forbidden to be taken inwardly. The oil of spikenard is good to warm cold places, and to digest crude and raw humours; it worketh powerfully on old cold griefs of the head and brain, stomach, liver, spleen, reins, and bladder. It purgeth the brain of rheum, being snuffed up the nostrils; being infused certain days in wine, and then distilled in a hot bath, the water is good inwardly and outwardly to be used for any coldness of the members. It comforts the brain, and helps cold pains of the

head

head, and the shaking palsy. Two or three spoonfuls thereof, being taken, help passions of the heart, swoonings, and the cholic: being drunk with wine, it is good against venomous bitings; and, being made into troches with wine, it may be reserved for an eye-medicine, which, being aptly applied, represseth the obnoxious humours thereof.

### STORAX - TREE. STYRAX.

KINDS. THERE are accounted three sorts of the storax-tree, whose names shall follow with their descriptions.

DESCRIPTION. 1. The usual storax-tree, *Styrax arbor vulgaris*. This storax-tree groweth very like the quince-tree, both for form and bigness, the leaves also are long and round, and somewhat like, but far les: whitish underneath, and stiff, the flowers stand both at the joints with the leaves, and at the ends of the branches consisting of five or six large whitish leaves, like those of the orange-tree, with some threads in the middle, after which come round berries, set in the cups that the flowers were in before, of the bigness of hazel-nuts, pointed at the ends, and hoary all over; each standing on a long footstalk, containing within them certain kernels in small shells. This yieldeth a most fragrant sweet gum, and clear, of the colour of brown honey.

2. Storax with maple-leaves, *Styrax folio aceris*. From a round root, covered with a crested or as it were a jointed bark, come forth, out of knots, three or five broad leaves, like those of the maple or plane tree, standing on small blackish long stalks, and are divided in three or five parts, full of veins, dented about the edges, and pointed at the ends.

3. Red storax, called in Latin *Styrax rubra*. This hath formerly by some been thought to be the bark of some kind of tree that went under the name of storax. But Serapio and Avicen divide storax into *liquida* and *sicca*: by *liquida* meaning the pure gum flowing from the tree, and not that *liquida* which we now call by that name; and by the *sicca* the fæces of the expressed oil from the fruit; but *calumita* is now taken of some to be red storax.

PLACE AND TIME. The first groweth in Provence of France, in Italy, Candy, Greece, and some other parts of Turkey, where it yieldeth no gum; but in Syria, Silicia, Pamphylia, Cyprus, and those hotter countries, it groweth much. It flow-ereth in the spring, yielding fruit in September.

GOVERNMENT AND VIRTUES. This is a solar plant: there is no part of this tree in use with us, but the gum that issueth out of it; it is of temperature hot in

the second degree, and dry in the first; it healeth, mollifieth, and digesteth, and is good for coughs, catarrhs, distillations of rheums, and hoarsenes. Pills made with it with a little turpentine, and taken, gently loosen the belly. It resisteth cold poisons; dropped into the ears, it helpeth the singings and noise in them; applied to the hips, joints, or shoulders, afflicted with cold aches, it resolveth and comforteth much, and is good to be put into baths, for lamenes of the joints and weariness by travel. It is also good to be put with white frankincense to perfume those that have catarrhs, rheums, and defluxions from the head to the nose, eyes, or other parts, by casting it on quick coals, and holding the head over the smoke. It dissolveth hard tumours in any part, and is good for the king's-evil.

### S W A L L O W - W O R T. ASCLEPIAS.

KINDS. OF this there are three kinds. The usual Latin name of swallow-wort is *Asclepias* or *Venice toxicum*; their distinct names follow in their descriptions.

DESCRIPTION. 1. Swallow-wort with white flowers, *Asclepias flore albo*. This swallow-wort riseth up with divers slender weak stalks, to be two or three feet long, not easy to break, scarce able to stand upright, and therefore for the most part leans or lies upon the ground, if it find not any thing to sustain it; whereon are set two leaves at the joints, being somewhat broad and long-pointed at the end; of a dark green colour, and smooth at the edges. At the joints with the leaves, towards the tops of the stalks, and at the tops themselves, come forth divers small white flowers, consisting of five pointed leaves apiece, of a sweet scent; after which come small long pods, thick above, in a great deal of white filken down, which when the pod is ripe openeth of itself, and sheddeth both seed and cotton upon the ground, if it be not carefully gathered. The roots are a great bush, of many strings fastened together at the head, smelling somewhat strong while they are fresh and green, but more pleasant when they are dried; both leaves and stalks perish every winter, and arise anew in the spring of the year, when the stalks, at their first springing, are of a blackish brown.

2. Swallow-wort with black flowers, *Asclepias flore nigro*. This groweth in the same manner that the former doth, having long slender rough branches, rising out to a greater height than the other, and twining about whatsoever standeth next unto them; having such-like dark green leaves set by couples, but somewhat smaller, and of a dark purplish colour; after which come more plentifully such-like pods, with a white filver down and seeds in them as the former. The roots hereof are

are not so bushy as the other, neither smell so strong; neither doth it give any milky, but a watery juice when it is broken.

3. Swallow-wort of Candy, *Asclepias Cretica*. This riseth up in the same fashion that the former do, with many slender flexible green branches, with leaves set at the joints on either side, as the white kind hath, and are very like them, but somewhat of a paler white colour. The flowers stand in the same manner, three or four together upon a stalk, but are somewhat of a paler white colour; to which succeed sometimes but one pod, and sometimes two together, thicker and shorter than those of the white kind; straked all along, and double-forked at the ends, wherein lie silk and seeds as in the former. The roots have not so strong a smell as the last, and have, as well as the rest of the plant, a scent like box-leaves.

PLACE AND TIME. The two first grow in rough and untilled ground, upon divers mountains in France, about Narbonne, Marseilles, and Montpelier, and in Italy also; the last in Candy. They flower in the months of June and July, and sometimes not until August; and their pods are ripe about a month after; the empty husks abide on the dry branches, when the seed and silk are fallen out.

GOVERNMENT AND VIRTUES. These are solar plants; the roots have a most sovereign faculty against all poisons, particularly against the *apocynum*, or dogs-bane; and are effectually given to such as are bitten by any venomous beast, or stung by any serpent or other creature; as also against the biting of a mad dog, a dram and an half thereof taken in *carduus*-water for many days together. It is taken also, in wine, against the plague and pestilence; a dram taken in bugloss-water is effectual against all passions of the heart; if the same quantity of citron-seeds be taken therewith, it easeth all the griping pains in the belly; the decoction of the roots made with white wine, taken for several days together, a good draught at a time, and sweating thereupon, cureth the dropsy. The same also procureth the jaundice, provoketh urine, and easeth the cough and all defects of the chest and lungs. The powder of the roots, taken with peony-seeds, is good against the falling sickness; or, with basil-seed, or the rind of pomecitron-seeds, is good against melancholy; and, taken with the roots of *dictamnus albus*, or bastard-dittany, will kill and expel worms. The decoction hereof, with comfrey-roots, made in wine, is good for those that have a rupture, or are bursten, or have received hurts by bruises. The powder of the roots or leaves is effectual to cleanse all putrid, rotten, and filthy, ulcers and sores, and may safely be used in all salves, unguents, and lotions, made for such purposes. The leaves and flowers boiled, and made into a poultice, and applied to the hard tumours or swellings of women's breasts, cure them speedily.

TOBACCO,

## TOBACCO, ENGLISH AND INDIAN. NICOTIANA.

**DESCRIPTION.** ENGLISH tobacco riseth up with a thick round stalk, about two feet high, whereon grow thick fat green leaves, not so large as the Indian, round-pointed, and not dented about the edges; at the tops stand divers flowers in green husks, scarcely above the brims of the husk, round-pointed also, and of a greenish yellow colour. Its seed is not very bright, but large, contained in great heads. The roots perish every winter, but rise generally of their own sowing.

**NAMES.** It is called in Latin *petum* and *nicotiana*.

**PLACE AND TIME.** English tobacco groweth much about Winscomb in Gloucestershire, as delighting in a fruitful soil; the other, which we smoke, groweth best in Virginia, and is thence carried to some parts of Spain, and there made up, and then brought to us, and named Spanish tobacco.

**GOVERNMENT AND VIRTUES.** It is a martial plant. It is found by good experience to be available to expel tough phlegm from the stomach, chest, and lungs; the juice thereof being made into a syrup, or the distilled water of the herb drunk; or the smoke taken by a pipe as is usual, but fasting. The same helpeth to expel worms in the stomach and belly, and to ease the pains in the head, and the griping pains in the bowels: it is profitable for those that are troubled with the stone in the kidneys, to ease pains, and, by provoking urine, to expel gravel and the stone; and hath been found very effectual to expel wind. The seed hereof is very effectual to help the tooth-ach, and the ashes of the burnt herb to cleanse the gums and make the teeth white. The herb bruised, and applied to the place grieved with the king's evil, helpeth it in nine or ten days effectually. Monardus saith it is a counter-poison for the biting of any venomous creature, the herb also being outwardly applied to the hurt place. The distilled water is often given with some sugar before the fit of an ague to lessen it, and takes it away in three or four times using. If the distilled faeces of the herb, having been bruised before the distillation, and not distilled dry, be set in warm dung for fourteen days, and afterwards hung up in a bag in a wine cellar, the liquor that distilleth therefrom is singularly good for cramps, aches, the gout, and sciatica, and to heal itches, scabs, and running ulcers. The juice is also good for all the said griefs, and likewise to kill lice in children's heads. The green herb, bruised and applied, cureth any fresh wound or cut whatsoever: and the juice, put into old sores, both cleanseth and healeth them. There is also made hereof a singularly good salve to help imposthumes, hard tumours, and swellings by blows or falls.

## TAMARISK-TREE. TAMARIX.

IT is so well known in the place where it groweth, that it needeth no description.

TIME. It flowereth about the end of May, or in June, and the seed is ripe and blown away in the beginning of September.

GOVERNMENT AND VIRTUES. It is under the dominion of Saturn. If the root, leaves, or young branches, be boiled in wine or vinegar, and drunk, and applied outwardly, it is very powerful against the hardnes of the spleen. The leaves, boiled in wine and drunk, are good to stay the bleeding of the hemorrhoidal veins, spitting of blood, and helpeth the jaundice, the cholic, and the bitings of all venomous serpents, except the asp. The bark is as effectual, if not more, to all the purposes aforesaid; and both it and the leaves boiled in wine, and the mouth and the teeth washed therewith, help the tooth-ach, the ear-ach, and the redness and watering of the eyes. The said decoction, with some honey put thereto, is good to stay gangrenes and fretting ulcers, and to wash those that are subject to knits and lice. The wood is very effectual to consume the spleen, and therefore to drink out of cups and cans made thereof is good for splenetic persons. The ashes of the wood are used for all the purposes aforesaid; and, besides, do quickly help the blisters raised by burnings or scaldings by fire or water. Alpinus and Veslingius affirm, that the Egyptians do with as much success use the wood hereof to cure the French disease, as others do lignum vitæ or guaiacum, and give it also to such as are possessed with the leprosy, scabs, pushes, ulcers, or the like; and it is available also to help the dropsy arising from the hardnes and obstructions of the spleen, as also for melancholy, and the black jaundice, that ariseth thereof.

## GARDEN TANSY. TANACETUM.

GARDEN TANSY is so well known, that it needeth no description.

TIME. It flowereth in June and July.

GOVERNMENT AND VIRTUES. Venus governs this herb. The herb bruised, and applied to the navel, stays miscarriages; boiled in ordinary beer, and the decoction drunk, it doth the like; also it consumes those phlegmatic humours which the cold and moist constitution of winter usually infects the body with, and that was the reason of eating tansy in the spring. The decoction of the common tansy, or the juice drunk in wine, is a singular remedy for all the griefs that come by stopping of the urine, helpeth the strangury, and those that have weak

reins and kidneys. It is very profitable to dissolve and expel wind in the stomach, belly, or bowels. If it be bruised, and often smelled to, as also applied to the lower part of the belly, it is very profitable for such women as are given to miscarry in child-bearing to cause them to go out their full time; it is used also against the stone in the reins, especially to men. The herb fried with eggs, which is called a tansy, helpeth to digest, and carry downward, those bad humours that trouble the stomach. Being boiled in oil, it is good for the finews shrunk by cramps, or pained with cold. The seed is very profitably given to children for worms, and the juice in drink is as effectual; and it is in this last capacity that it is principally to be regarded. No complaint is so frequent, and few bring on so much mischief; besides the more common and obvious disorders which they occasion, a wasting, even to death, and putrid fevers, sometimes accompany, and indeed arise from, them; and, oftener than is thought, they are the cause of epileptic fits. The medicines given against them are for the most part ineffectual, and many of them mischievous. Hellebore has brought on convulsions; and every one knows the danger of mercurials.

WILD TANSY, OR SILVER-WEED. *POTENTILLA.*

THIS is so well known, that it needeth no description.

PLACE. It groweth almost in every place.

TIME. It flowereth in June and July.

GOVERNMENT AND VIRTUES. This is likewise an herb of Venus. Wild-tansy stayeth the lask, and all the fluxes of blood, in men or women, which some say it will do if the green herb be worn in the shoes, so it be next the skin; it stayeth also spitting or vomiting of blood. It is much commended to help children that are bursten, and have a rupture, being boiled in water and salt. Being boiled in wine and drunk, it easeth the griping pains of the bowels, and is good for the sciatica and joint-achs. The same boiled in vinegar with honey and alum, and gargled in the mouth, easeth the pains of the tooth-ach, fasteneth loose teeth, helpeth the gums that are sore, and settleth the palate of the mouth in its place when it is fallen down. It cleanseth and healeth the ulcers in the mouth or secret parts, and is very good for inward wounds, and to close the lips of green wounds; as also to heal old, moist, corrupt, running sores, in the legs or elsewhere. Being bruised and applied to the soles of the feet, and the wrists, it wonderfully cooleth the hot fits of agues, be they never so violent. The distilled water cleanseth the skin of all discolourings therin, as morphew, sun-burning, &c. as also pimples, freckles,

and

and the like; and dropped into the eyes, or cloths wet therein and applied, taketh away the heat and inflammations in them.

### THISTLES. *CARDUUS.*

OF these are many kinds growing here in England, which are so well known, that they need no description. Their difference is easily known by the places where they grow, viz.

PLACE. Some grow in fields, some in meadows, and some among the corn; others on heaths, greens, and waste grounds, in many places.

TIME. They all flower in July and August, and their seed is ripe quickly after.

GOVERNMENT AND VIRTUES. Mars rules them. Thisiles are good to provoke urine, and to amend the rank smell of the arm pits, or of the whole body, being boiled in wine and drunk; and are said also to help a stinking breath, and to strengthen the stomach. Pliny saith, that the juice bathed on the place that wanteth hair, it being fallen off, will cause it to grow again speedily.

### MELANCHOLY THISTLE. *CARDUUS HELENIOIDES.*

DESCRIPTION. It riseth up with a tender single hoary green stalk, bearing thereon four or five long hoary green leaves, dented about the edges, the points whereof are little or nothing prickly, and at the top usually but one head, yet sometimes from the besom of the uppermost leaf there shooteth forth another smaller head, scaly and somewhat prickly, with many reddish purple thrums in the middle, which, being gathered fresh, will keep the colour a great while, and fade not from the stalk in a long time, while it perfecteth the seed. The root hath many long strings fastened to the head, or upper parts, which is blackish, and perisheth not.

There is another sort, little differing from the former, but that the leaves are more green above and more hoary underneath, and the stalk, being about two feet high, bearing but one large scaly head, with threads and seeds as the former.

PLACE. They grow in many moist meadows of this land, as well in the southern as in the northern parts.

TIME. They flower about July or August, and their seed ripeneth quickly after.

GOVERNMENT AND VIRTUES. It is under Capricorn, and therefore under both Saturn and Mars: one rids melancholy by sympathy, the other by antipathy. Their virtues are but few, but those not to be despised; for the decoction of the

thistle.

thistle in wine, being drunk, expels the superfluous melancholy out of the body, and makes a man merry. Superfluous melancholy causeth care, fear, sadness, despair, envy, and many evils besides; but religion teacheth to wait upon Providence, and cast our care upon him who careth for us.

OUR LADY'S THISTLE. *CARDUUS MARIANUS.*

**DESCRIPTION.** OUR lady's thistle hath divers large and broad leaves, lying on the ground, cut in and as it were crumpled, but rather hairy on the edges; of a white green shining colour, wherein are many lines and strakes of a milky-white colour running all over, and set about with many sharp and stiff prickles, among which riseth up one or more strong, round, and prickly stalks, set full of the like leaves up to the top, where, at the end of every branch, cometh forth a great, prickly, thistle-like, head, strongly armed with pricks, and with bright purple thrums rising out of the middle of them: after they are past, the seed groweth in the said heads, lying in a great deal of soft white down, which is somewhat flattish and shining, large and brown. The root is great, spreading in the ground, with many strings and small fibres fastened thereto. All the whole plant is bitter in taste.

**PLACE.** It is frequent on the bank of every ditch.

**TIME.** It flowereth and seedeth in June, July, and August.

**GOVERNMENT AND VIRTUES.** Our lady's thistle is under Jupiter, and thought to be as good as *carduus benedictus* for agues, and to prevent and cure the infection of the plague, as also to open obstructions of the liver and spleen, and thereby is good against the jaundice. It provoketh urine, breaketh and expelleth the stone, and is good for the dropsy. It is effectual also for the pains in the sides, and many other inward pains and gripings. The seed and distilled water are held powerful to all the purposes aforesaid: and, besides, it is often applied both inwardly to drink, and outwardly with cloths or sponges to the region of the liver, to cool the distemperature thereof, and to the region of the heart, against swoonings and passions of it. It cleanseth the blood exceedingly: and in spring, if you boil the tender plant, it will change your blood as the season changes, which is a very sure way to preserve health.

WOOLLY OR COTTON THISTLE. *ONOPORDON.*

**DESCRIPTION.** THIS hath many large leaves lying on the ground, somewhat cut in, and as it were crumpled, on the edges, of a green colour on the upper side, but covered over with a long hairy wool, or cottony down, set with sharp pricks, from

from the middle of whose heads of flowers come forth many purplish crimson threads, sometimes white, although but seldom. The seed that followeth in these white downy heads, is somewhat large, long, and round, resembling the seed of our lady's thistle, but paler. The root is great and thick, spreading much, yet usually dieth after seed-time.

**PLACE.** It groweth on divers ditch-banks, and in corn-fields and highways generally throughout England; and is often found growing in gardens.

**TIME.** It flowereth and beareth seed about the end of summer, when other thistles flower and seed.

**GOVERNMENT AND VIRTUES.** It is a plant of Mars. Dioscorides and Pliny write, that the leaves and roots hereof, taken in drink, help those that have a crick in their neck, that they cannot turn it unless they turn their whole body. Galen saith, that the roots and leaves hereof are good for such persons as have their bodies drawn together by some spasm or convulsion, or other infirmities, as the rickets in children; being a disease that hindereth their growth, by binding their nerves, ligaments, and whole structures of their body.

#### FULLERS THISTLE, OR TEASEL. *DIPSACUS.*

IT is so well known that it needs no description, being used by the cloth-workers.

The wild teasel is in all things like the former, but that the prickles are small, soft, and upright, not hooked or stiff: and the flowers of this are of a fine blush or pale carnation colour, but of the manured kind whitish.

**PLACE.** The first groweth, being sown, in gardens or fields, for the use of cloth-workers. The other near ditches in many places of Great Britain.

**TIME.** They flower in July, and are ripe near the end of August.

**GOVERNMENT AND VIRTUES.** It is an herb of Venus. Dioscorides saith, that the root bruised and boiled in wine until it be thick, and kept in a brazen vessel or pot, and afterwards spread as a salve and applied, doth heal fistulas, and also taketh away warts and wens. The juice of the leaves, dropped into the ears, killeth worms in them. The distilled water of the leaves, dropped into the eyes, taketh away redness and mists in them that hinder the sight; and is often used by women to preserve their beauty, and to take away redness and inflammations, and all other discolourings. The water, that is received in the hollownes of the leaves, is good for inflammations of the eyes. It also takes off spots from the face, and beautifies it. Boiled in wine, it purges by urine.

## TREACLE-MUSTARD. CLYPEOLA.

DESCRIPTION. IT riseth up with a hard round stalk about a foot high, parted into some branches, having divers soft green leaves somewhat long and narrow set thereon, waved, but not cut in on the edges, broadest towards the ends, and somewhat round-pointed; the flowers are white that grow at the tops of the branches, spike-fashion, one above another: after which come large round pouches parted in the middle with a furrow, having one blackish brown seed on either side, somewhat sharp in taste, and smelling of garlic, especially in the fields where it is natural, but not so much in gardens: the roots are small and thready, perishing every year.

## SLOE-BUSH, OR BLACK-THORN. PRUNUS.

IT is so well known, that it needeth no description.

PLACE. It groweth in every country, in the hedges and borders of fields.

TIME. It flowereth in April, and sometimes in March, but ripeneth after all other plums whatsoever, and is not fit to be eaten until the autumn frost have mellowed it.

GOVERNMENT AND VIRTUES. All the parts of the sloe-bush are binding, cooling, and drying, and effectual to stay the bleeding at the nose and mouth, or any other place; the lack of the belly, or stomach, or the bloody flux; and to ease the pains in the fides or bowels, by drinking the decoction of the bark of the roots, or more usually the decoction of the berries either fresh or dried. The conserve is also of very much use to the purposes aforesaid; but the distilled water of the flowers, first steeped in sack for a night, and drawn therefrom by the heat of a bath, is a most certain remedy, tried and approved, to ease all manner of gnawing in the stomach, fides, and bowels, or any griping pains in any of them, to drink a small quantity when the extremity of pain is upon them. The leaves also are good to make lotions to gargle and wash the mouth and throat, wherein are swellings, sores, or kernels, and to stay the defluxions of rheum to the eyes or other parts, as also to cool the heat and inflammations in them, and to ease hot pains of the head, by bathing the forehead and temples therewith. The simple distilled water of the flowers is very effectual for the said purposes, and the condensate juice of the floes. The distilled water of the green berries is used also for the same purposes.

THOROUGH-

THOROUGH-WAX, OR THOROUGH-LEAF. *Bupleurum.*

**DESCRIPTION.** COMMON thorough-wax sendeth forth one straight round stalk, and sometimes more, two feet high and better, whose lower leaves, being of a bluish-green colour, are smaller and narrower than those up higher, and stand close thereto, not compassing it, but, as they grow higher, they more and more encompass the stalk, until it wholly (as it were) pass through them, branching towards the top into many parts, where the leaves grow smaller again, every one standing singly. The flowers are very small and yellow, standing in tufts at the heads of the branches, where afterwards grow the seed, which are blackish, many thick thrust together. The root is small, long, and woody, perishing every year after seed-time, and rising again plentifully of its own sowing.

**PLACE.** It is found growing in many corn-fields and pasture-grounds in Great Britain.

**TIME.** It flowereth in July, and the seed is ripe in August.

**GOVERNMENT AND VIRTUES.** Both this and the former are under the influence of Saturn. Thorough-wax is of singular good use for all sorts of bruises and wounds, either inward or outward, and old ulcers and sores likewise, if the decoction of the herb with water or wine be drunk, and the places washed therewith, or the juice, or green herb bruised or boiled, either by itself or with other herbs, in oil or hog's grease, be made into an ointment to serve all the year. The decoction of the herb, or the powder of the dried herb, taken inwardly, and the same, or the green leaves bruised and applied outwardly, is singularly good to cure ruptures and burstings, especially in children, before they be too old.

T H Y M E. *THYMUS.*

IT is very unnecessary to describe an herb so commonly known.

**GOVERNMENT AND VIRTUES.** It is under the government of Venus. This herb is a notable strengthener of the lungs; there is scarcely a better remedy growing for that disease in children which they commonly call the chin-cough. It purgeth the body of phlegm, and is an excellent remedy for shortness of breath: it kills worms in the belly. An ointment made of it takes away hot swellings and warts, helps the sciatica and dulness of sight, takes away pains and hardness of the spleen. It is excellent good for those that are troubled with the gout; it easeth pains in the loins and hips. The herb taken any way inwardly comforts the stomach much, and expels wind.

## WILD THYME, OR MOTHER OF THYME. THYMUS.

THE wild thyme also is so well known, that it needs no description.

PLACE. It may be found in commons and other barren places throughout the nation.

GOVERNMENT AND VIRTUES. This is likewise under the dominion of Venus, though under the sign Ariés, and therefore chiefly appropriated to the head: it provoketh urine, and easeth the griping pains of the belly, cramps, ruptures, and inflammations of the liver. If you make a vinegar of the herb, and anoint the head with it, it will soon ease the pain thereof. It is excellent good to be given either in a frenzy or a lethargy, although they are two contrary diseases. It helps the spitting of blood, coughing, and vomiting; it comforts and strengthens the head, stomach, reins, and womb; expels wind, and breaks the stone.

## TORMENTIL, OR SEPTFOIL. TORMENTILLA.

DESCRIPTION. THIS hath many reddish, slender, weak, branches, rising from the root, lying upon the ground, rather leaning than standing upright, with many short leaves that stand closer to the stalks than cinquefoil doth, (which this is very like,) with the footstalk encompassing the branches in several places; but those that grow next to the ground are set upon long footstalks, each whereof are like the leaves of cinquefoil, but somewhat longer and smaller, and dented about the edges, many of them divided into five leaves only, but most of them into seven, whence it is also called septfoil; yet some may have six, and some eight, according to the fertility of the soil. At the tops of the branches stand divers small yellow flowers, consisting of five leaves, like those of cinquefoil, but smaller. The root is smaller than bistort, somewhat thick, but blacker without, and not so red within, yet sometimes a little crooked, having many blackish fibres.

PLACE. It groweth as well in woods and shadowy places as in the open country, about the borders of the fields in many places of England, and almost in every broom-field in Essex.

TIME. It flowereth all the summer.

GOVERNMENT AND VIRTUES. This is an herb of the Sun. Tormentil is most excellent to stay all kinds of fluxes of blood or humours in man or woman, whether at nose, mouth, belly, or any wound in the veins or elsewhere. The juice of the herb, or root, taken in drink, not only resisteth all poison or venom of any creature, but of the plague itself, and pestilential fevers, and contagious diseases, as the French disease,

disease, measles, purples, &c. expelling the venom and infection from the heart by perspiration; if the green root be not to be had, the powder of the dry root is as effectual, a dram thereof being taken every morning. The decoction likewise of the herb and roots made in wine, and drunk, worketh the same effect; and so doth the distilled water of the herb and root, being steeped in wine for a night, and then distilled in *balneo mariæ*. The water thus distilled, taken with some Venice treacle, and the party presently laid to sweat, will expel any venom or poison, or the plague, fever, &c. for it is an ingredient of especial respect in all antidotes or counter-poisons. There is not found any root more effectual to help any flux of the belly, stomach, spleen, or blood, than this, to be taken inwardly, or applied outwardly. The juice doth wonderfully open obstructions of the liver and lungs, and thereby in short space helpeth the yellow-jaundice: some make cakes hereof, as well to stay all fluxes as to restrain all choleric belchings, and much vomiting, with loathing. Andreas Valesius is of opinion, that the decoction of this root is no less effectual to cure the venereal disease than guaiacum; and it is not unlikely, because it so mightily resisteth putrefaction. Lobel saith, that Rondeletius used it as hermodactils for joint-achs; the powder also, or decoction to be drunk, or to sit therein as a bath, is a fine remedy against abortion in women, if it proceed from the weakness of the inward retentive faculty: as also a plaster made therewith and vinegar, applied to the reins of the back, doth much help, not only this, but also those that cannot hold their water, the powder being taken in the juice of plantane; and it is also commended against the worms in children. It is very powerful in ruptures and burstings; as also for bruises and falls, to be used as well outwardly as inwardly. The root hereof, made up with pellitory of Spain and alum, and put into a hollow tooth, not only assuageth the pain, but stayeth the flux of humours which caused it. Tormentil is no less effectual and powerful a remedy for outward wounds, sores, and hurts, than for inward, and is therefore a special ingredient in wound-drinks, lotions, and injections, for foul, corrupt, rotten, sores and ulcers of the mouth, or any other parts of the body; and to put either the juice or powder of the root into such ointments, plasters, and such things as are to be applied to wounds and sores. It also dissolveth all knots, kernels, and hardnes, about the ears, throat, and jaws; and the king's evil, if the leaves and roots be bruised and applied thereto. The same also easeth the pains of the sciatica, or hip-gout, by restraining the sharp humours that flow thereto. The juice of the leaves and roots, used with a little vinegar, is also a special remedy against the running sores of the head or other parts, scabs also, and the itch, or any such eruptions in the skin, proceeding of salt and sharp hu-

mours. The same also is effectual for the piles, or hemorrhoids, if they be washed and bathed therewith, or with the distilled water of the herb and roots. It is found also helpful to dry up any sharp rheum that distilleth from the head into the eyes, causing redness, pain, waterings, itchings, or the like, if a little prepared tutia, or white amber, be used with the distilled water thereof. The Sun rules this herb.

### T U R N S O L. HELIOTROPIUM.

**DESCRIPTION.** The greater turnsol riseth up with one upright stalk about a foot high or more, dividing itself almost from the bottom into smaller branches of a hoary colour. At each joint of the stalk and branches grow two small broad leaves, somewhat white or hoary also. At the tops of the stalks of the branches stand many small white flowers, consisting of four and sometimes five very small leaves, set in order one above another, upon a small crooked spike, which turneth inwards, opening by degrees as the flowers blow open; after which, in their places, come forth small cornered seeds, four for the most part standing together. The root is small and thready, perishing every year; and the seed, shedding every year, raiseth it again the next spring.

**PLACE.** It groweth in gardens, and flowereth and feedeth with us in England, notwithstanding it is not natural to Great-Britain, but to Italy, Spain, and France, where it groweth plentifully.

**GOVERNMENT AND VIRTUES.** It is an herb of the Sun. Dioscorides saith, that a good handful of this, which is called the greater turnsol, boiled in water and drunk, purgeth both choler and phlegm; and, boiled with cummin, and drunk, helpeth the stone in the reins, kidneys, or bladder, provoketh urine and the courses, and causeth an easy and speedy delivery in child-birth. The leaves bruised and applied to places pained with the gout, or that have been newly set, do give much ease. The seed and the juice of the leaves also, being rubbed with a little salt upon warts, wens, and other hard kernels, in the face, eye-lids, or any other part of the body, will, by often using, take them away.

### MEADOW TREFOIL, OR HONEY-SUCKLES. TRIFOLIUM PRATENSIS.

IT is so well known, especially by the name of honey-suckles, white and red, that I need not describe them.

**PLACE.** They grow almost every where in England.

**GOVERNMENT AND VIRTUES.** Mercury hath dominion over the common sorts, Dodoneus saith, the leaves and flowers are good to ease the griping pains

of the guts, the herb being boiled and used in a clyster. If the herb be made into a poultice and applied to inflammations, it will ease them. The juice dropped into the eyes is a familiar medicine with many country people to take away the pin and web (as they call it) in the eyes; it also allayeth the heat and blood-shooting of them. Country people do also in many places drink the juice hereof against the biting of an adder, and, having boiled the herb in water, they first wash the place with the decoction, and then lay some of the herb to the hurt place. The herb also, boiled in swine's grease, and so made into an ointment, is good to apply to the biting of any venomous creatures. It is held likewise to be good for wounds. The seed and flowers boiled in water, and after made into a poultice with some oil, and applied, help hard swellings and imposthumes.

#### H E A R T T R E F O I L. TRIFOLIUM.

BESIDES the ordinary sorts of trefoil, here are two more remarkable, and one of which may probably be called heart trefoil, not only because the leaf is triangular like the heart of a man, but also because each leaf contains the perfect icon of a heart, and that in its proper colour, viz. a flesh-colour.

PLACE. It groweth near Bow, and parts adjacent.

GOVERNMENT AND VIRTUES. It is under the dominion of the Sun; and, if it were used, it would be found as great a strengthener of the heart and cherisher of the vital spirit as grows, relieving the body against faintings and swoonings, fortifying it against poisons and pestilence, and defending the heart against the noisome vapours of the spleen.

#### P E A R L T R E F O I L. TRIFOLIUM.

IT differs not from the common sort, save only in this one particular, that it hath a white spot in the leaf like a pearl; it is particularly under the dominion of the Moon, and its icon sheweth that it is of singular virtue against the pearl, or pin and web, in the eyes.

#### T U T S A N, O R P A R K - L E A V E S. HYPERICUM.

DESCRIPTION. IT hath brownish shining stalks, crested all the length thereof, rising to be two and sometimes three feet high, branching forth even from the bottom, having divers joints, and at each of them two fair large leaves, of a dark bluish-green colour on the upper side, and of a yellowish-green underneath, turning reddish towards autumn, but abiding on the branches all the winter. At the

tops

tops of the stalks and branches stand large yellow flowers, and heads with seed, which, being greenish at the first, and afterwards reddish, turn to be of a blackish-purple colour when they are thoroughly ripe, with small brownish seed in them, and then yield a reddish juice or liquor, of a reasonable good scent, somewhat resinous, and of a harsh and styptic taste, as the leaves also and the flowers be, although much less. The root is of a brownish colour, somewhat great, hard, and woody, spreading well in the ground.

**PLACE.** It groweth in many woods, groves, and woody grounds, as parks and forests, and by hedge-sides, in many places in Great-Britain.

**TIME.** It flowereth later than St. John's or St. Peter's wort.

**GOVERNMENT AND VIRTUES.** It is an herb of Saturn, and a great anti-venerean. Tutsan purgeth choleric humours, as St. Peter's wort is said to do; for therein it worketh the same effects, both to help the sciatica and gout, and to heal burnings by fire. It stayeth also the bleeding of wounds, if either the green herb be bruised or the powder of the dry be applied thereto. It hath been accounted, and certainly is, a sovereign herb to heal any wound or sore either outwardly or inwardly, and therefore always used in drinks, lotions, balms, oils, ointments for any sort of green wound, or old ulcers and sores; in all which the continual experience of former ages hath confirmed the use thereof to be admirably good, though it be not so much in use now as when physicians and surgeons were so wise as to use herbs more than they do at present.

#### GARDEN VALERIAN. VALERIANA.

**DESCRIPTION.** This hath a thick short greyish root, lying for the most part above ground, shooting forth on all sides other such like small pieces or roots, which have all of them many long and great strings or fibres under them, in the ground, whereby it draweth nourishment. From the heads of these roots spring up many green leaves, which at first are somewhat broad and long, without any division at all in them, or denting on the edges: but those that rise up after are more and more divided on each side, some to the middle-rib, made of many leaves together on a stalk, and those upon the stalk in like manner more divided, but smaller towards the top than below. The stalk riseth to be a yard high or more, sometimes branched at the top, with many small whitish flowers, sometimes dashed over at the edges with a pale purplish colour, of a little scent; which passing away, there followeth small brownish-white seed that is easily carried away with the wind. The root smelleth more strong than either leaf or flower, and is of more use in medicine.

**PLACE.**

PLACE. It is generally kept with us in our gardens.

TIME. It flowereth in June and July, and continueth flowering until the frost pull it down.

GOVERNMENT AND VIRTUES. This is under the influence of Mercury. Dioscorides saith, that the garden valerian hath a warming faculty, and that, being dried and given to drink, it provoketh urine, and helpeth the strangury. The decoction thereof, likewise taken, doth the like also, and taketh away pains of the fides, provoketh urine, and helpeth the strangury. It is used as a counter-poison. Pliny saith, that the powder of the root, given in drink, or some of the decoction thereof taken, helpeth all stoppings and stranglings in any part of the body, whether they proceed of pains in the chest or fides, and taketh them away. The root of valerian, boiled with liquorice, raisins, and anise-seed, is good for those that are short-winded, and for those that are troubled with a cough, and helpeth to open the passages and to expectorate phlegm easily. It is given to those that are bitten or stung by any venomous creature, being boiled in wine. It is of special virtue against the plague, the decoction thereof being drunk, and the root being used to smell to; it helpeth also to expell the wind. The green herb with the root taken fresh, being bruised and applied to the head, taketh away the pains and prickings therein, stayeth rheums and thin distillations; and, being boiled in white wine, and a drop thereof put into the eye, taketh away the dimness of the sight, or any pin or web therein. It is of excellent property to heal any inward sores or wounds, as also for outward hurts or wounds, and draweth any splinter or thorn out of the flesh.

#### V E R V A I N . V E R B E N A .

DESCRIPTION. The common vervain hath somewhat long and broad leaves next the ground, gashed about the edges, and some only deeply dented, or cut all alike, of a blackish-green colour on the upper fide, and somewhat grey underneath. The stalk is square, branched into several parts, rising about two feet high, especially if you reckon the long spike of flowers at the tops of them, which are set on all fides one above another, and sometimes two or three together, being small and gaping, of a purplish blue colour and white intermixed; after which come small round seed in small and somewhat-long heads. The root is small and long, but of no use.

PLACE. It groweth generally throughout England, in divers places by the hedges and way-fides, and other waste grounds.

TIME. It flowereth in July, and the seed is ripe soon after.

**GOVERNMENT AND VIRTUES.** This also is an herb of Venus, and an excellent herb for the womb, to strengthen it, and remedy all the cold griefs of it, as plantane doth the hot. The herb bruised and hung about the neck, helps the head-ach. Vervain is hot and dry, bitter, opening obstructions, cleansing, and healing. It helpeth the yellow jaundice, the dropsy, and the gout, the defects of the reins and lungs, and generally all inward pains and torments of the body, the leaves being boiled and drunk. The same is held to be good against the biting of serpents, and other venomous beasts; and against the plague, and both tertian and quartan agues; killeth and expelleth worms in the belly, and causeth a good colour in the face and body; strengtheneth as well as correcteth the diseases of the stomach and lungs, coughs, shortness of breath and wheezings, and is singular good against the dropsy, to be drunk with some peony-seed bruised and put thereto; and is no less prevalent for the defects of the reins and bladder, to cleanse them of those humours that engender the stone, and helpeth to break the stone, and to expel gravel. It consolidateth and healeth also all wounds both inward and outward, and stayeth bleedings; and, used with some honey, healeth all old ulcers and fistulas in the legs or other parts of the body, as also those ulcers that happen in the mouth; or, used with old hog's grease, it helpeth the swellings and pains of the secret parts in man or woman, as also the piles and hemorrhoids. Applied with some oil of roses and vinegar unto the forehead and temples, it easeth the inveterate pains and aches of the head. The leaves bruised, or the juice of them mixed with some vinegar, doth wonderfully cleanse the skin, and taketh away morphew, freckles, and other such-like inflammations and deformities of the skin in any part of the body. The distilled water of the herb, when it is in its full strength, dropped into the eyes, cleanseth them from films, clouds, or mists, that darken the sight, and wonderfully strengtheneth the optic nerves. The said water is very powerful in all the diseases aforesaid, either inward or outward, whether they be old corroding sores or green wounds.

### VINE. VITIS.

**VIRTUES.** The leaves of the English vine, being boiled, make a good lotion for sore mouths; being boiled with barley-meal into a poultice, it cools inflammations of wounds. The droppings of the vine when it is cut in the spring, which country people call *tears*, being boiled into a fyrup with sugar, and taken inwardly, are excellent to stay women's longings; also the tears of the vine drunk, two or three spoonfuls at a time, break the stone in the bladder. This is a very good

good remedy; but the salt of the leaves is held to be better. The ashes of the burnt branches will make teeth that are black as a coal to be as white as snow; if you do but every morning rub them with it. It is a tree of the Sun, very sympathetical with the body of man.

### VIOLETS. VIOLA.

BOTH the tame and wild are so well known, that they need no description.

TIME. They flower until the end of July, but are best in March and the beginning of April.

GOVERNMENT AND VIRTUES. They are a fine pleasing plant of Venus, of a mild nature, no way harmful. All the violets are cold and moist while they are fresh and green, and are used to cool any heat or distemperature of the body either inwardly or outwardly, as inflammations in the eyes, &c. imposthumes also, and hot swellings, to drink the decoction of the leaves or flowers made with water in wine, or to apply them poultice-wise to the grieved place; it likewise easeth pains in the head caused through want of sleep, being applied in the same manner, or with oil of roses. A dram-weight of the dried leaves or flowers of violets (but the leaves more strongly) doth purge the body of choleric humours, and assuageth the heat, being taken in a draught of wine or any other drink. The powder of the purple leaves of the flowers only, picked and dried, and drunk in water, is said to help the quinsy, and the falling sickness in children, especially in the beginning of the disease. The flowers of the white violets ripen and dissolve swellings.

### VIPERS BUGLOSS. ECHIUM.

DESCRIPTION. THIS hath many long rough leaves lying on the ground, from among which rise up divers hard round stalks, very rough, as if they were thick set with prickles or hairs, whereon are set long, rough, hairy, or prickly, sad-green, leaves, somewhat narrow, the middle rib for the most part being white. The flowers stand at the top of the stalks, branched forth into many long spiked leaves of flowers, bowing or turning like turnsol, all of them opening for the most part on one side, which are long and hollow, turning up the brims a little, of a purplish violet colour in them that are fully blown, but more reddish while they are in the bud, as also upon their decay and withering; but in some places of a paler purple colour, with a long pointel in the middle, feathered or parted at the top. After the flowers are fallen, the seeds, growing to be ripe, are blackish, cornered, and pointed somewhat.

somewhat like the head of a vine. The root is somewhat great, and blackish, and woolly, when it groweth toward seed-time; and perisheth in the winter.

There is another sort, little differing from the former, only in that it beareth white flowers.

PLACE. The first groweth wild almost every where. That with white flowers about Lewes, in Sufsex.

TIME. They flower in summer; and their seed is ripe quickly after.

GOVERNMENT AND VIRTUES. This is an herb of the Sun. It is an especial remedy against the biting of the viper and all other venomous beasts or serpents, as also against poison and poisonous herbs. Dioscorides and others say, that whosoever shall take of the herb or root before they be bitten shall not be hurt by the poison of any serpent. The roots or seed are thought to be most effectual to comfort the heart, and expel sadness, or cause less melancholy; it tempers the blood, and allayeth hot fits of agues. The seed drunk in wine procureth abundance of milk in women's breasts. The same also easeth the pains in the loins, back, and kidneys.

The distilled water of the herb when it is in flower, is excellent to be applied either inwardly or outwardly, for all the griefs aforesaid. There is a syrup made thereof, very effectual for comforting the heart, and expelling sadness and melancholy.

#### WALL-FLOWERS, OR WINTER GILLY-FLOWERS. *CHEIRANTHUS.*

THE garden kinds are so well known, that they need no description.

DESCRIPTION. The common single wall-flowers, which grow wild abroad, have sundry small, long, narrow, and dark-green, leaves, set without order upon small round whitish woody stalks, which bear at the tops divers single yellow flowers one above another, every one having four leaves apiece, and of a very sweet scent: after which come long pods containing reddish seed. The root is white, hard, and thready.

PLACE. It groweth upon church walls, and other stone walls in divers places. The other sorts in gardens only.

TIME. All the single kinds do flower in the end of autumn, and, if the winter be mild, especially in the months of February, March, and April, and until the heat of the spring do spend them; but the double kinds continue not flowering in that manner all the year long, although they flower very early sometimes, and in some places very late.

GOVERNMENT

GOVERNMENT AND VIRTUES. The Moon rules them. Galen, in his seventh book of simple medicines, saith, that the yellow wall-flowers work more powerfully than any of the other kinds, and are therefore of more use in physic. They cleanse the blood and free the liver and reins from obstructions, stay inflammations and swellings, comfort and strengthen any part weak or out of joint; help to cleanse the eyes from mistiness and films, and to cleanse foul and filthy ulcers in the mouth or any other part, and are a singular remedy for the gout, and all aches and pains in the joints and sinews. A conserve made of the flowers is used as a remedy both for the apoplexy and palsey.

#### WALNUT-TREE. JUGLANS.

IT is so well known, that it needeth no description.

TIME. It blossemeth early, before the leaves come forth; and the fruit is ripe in September.

GOVERNMENT AND VIRTUES. This is a plant of the Sun; let the fruit of it be gathered accordingly, which you shall find to be of most virtue whilst they are green, before they have shells. The bark of the tree doth bind and dry very much, and the leaves are much of the same temperature; but the leaves, when they are older, are heating and drying in the second degree, and harder of digestion than when they are fresh, which by reason of their sweetnesse are more pleasing and better digesting in the stomach; and, taken with sweet wine, they move the belly downwards; but, being old, they grieve the stomach, and in hot bodies cause choler to abound, and the head-ach, and are an enemy to those that have a cough; but are less hurtful to those that have colder stomachs, and are said to kill the broad worms in the belly or stomach. If they be taken with onions, salt, and honey, they help the biting of a mad dog, or the venom or infectious poison of any beast, &c. Coneus Pompeius found in the treasury of Mithridates king of Pontus, when he was overthrown, a scroll of his own hand-writing, containing a medicine against any poison and infection, which is this: Take two dry walnuts, and as many good figs, and twenty leaves of rue, bruised and beaten together with two or three corns of salt, and twenty juniper-berries; which, taken every morning fasting, preserveth from danger of poison or infection that day it is taken. The juice of the outer green husks, boiled up with honey, is an excellent gargle for sore mouths, the heat and inflammations in the throat and stomach. The kernels, when they grow old, are more oily, and therefore not so fit to be eaten; but are then used to heal the wounds of the sinews, gangrenes, and carbuncles. The said kernels, being burned, are very astringent, and will then

stay lasks and women's courses, being taken in red wine; and stay the falling of the hair, and make it fair, being anointed with oil and wine. The green husks will do the like, being used in the same manner. The kernels, beaten with rue and wine, being applied, help the quinsy; and, bruised with honey, and applied to the ears, ease the pains and inflammations of them. A piece of the green husk, put into a hollow tooth, easeth the pain. The oil that is pressed out of the kernels is very profitably taken inwardly, like oil of almonds, to help the cholic, and to expel wind; an ounce or two thereof may be taken at a time. The young green nuts, taken before they be half ripe, and preserved with sugar, are of good use for those that have weak stomachs; or fluxions thereon. The distilled water of the unripe green husk is of excellent use to cool the heat of agues, being drunk an ounce or two at a time, as also to resist the infection of the plague, if some of it be also applied to the sores thereof. The same likewise cooleth the heat of green wounds and old ulcers, and healeth them. The distilled water of the green husks, when they are shelled from the nuts, being drunk with a little vinegar, is also found by experience to be good for those that are infected with the plague, so as before the taking thereof a vein be opened. The said water is very good against the quinsy, being gargled and bathed therewith, and wonderfully helpeth deafnes, the noise and other pains in the ears. The distilled water of the young green leaves, in the end of May, performeth a singular cure on foul running ulcers and sores, to be bathed with wet cloths or sponges applied to them every morning.

#### WOLD, WELD, OR DYERS WEED. RESEDA.

**DESCRIPTION.** The common kind groweth bushing with many leaves, long, narrow, and flat upon the ground, of a dark bluish-green colour, somewhat like unto woad, but nothing so large; a little crumpled, and as it were round-pointed, which do so abide the first year: and, the next spring, from among them rise divers round stalks two or three feet high, beset with many such-like leaves thereon, but smaller, and shooting forth some small branches, which, with the stalks, carry many small yellow flowers in a long spiked head at the tops of them, where afterwards come the seed, which is small and black, inclosed in heads that are divided at the tops into four parts. The root is long, white, and thick, abiding the winter. The whole herb changeth to be yellow after it hath been in flower awhile.

**PLACE.** It groweth every where by the way-sides, in moist grounds as well as dry, in corners of fields and by-lanes, and sometimes all over the field. In Sussex and Kent they call it green weed.

TIME. It flowereth about June.

GOVERNMENT AND VIRTUES. Mathiolus saith, that the root hereof cutteth tough phlegm, digesteth raw phlegm, thinneth gross humours, dissolveth hard tumours, and openeth obstructions. Some highly commend it against the bitings of venomous creatures, to be taken inwardly, and applied outwardly to the hurt-place; as also for the plague and pestilence. The people in some parts of England bruise the herb, and lay it to cuts or wounds in the hands or legs,

### W H E A T. TRITICUM.

ALL the several kinds hereof are so well known unto all people, that a description is unnecessary.

GOVERNMENT AND VIRTUES. It is under Venus. Dioscorides saith, that to eat the corns of green wheat is hurtful to the stomach, and breedeth worms. Pliny saith, that the corns of wheat roasted upon an iron pan, and eaten, are a present remedy for those that are chilled with cold. The oil, pressed from wheat between two thick plates of iron or copper heated, healeth all tetter and ring-worms, being used warm, and hereby Galen saith he hath known many to be cured. Mathiolus commendeth the same oil to be put into hollow ulcers to heal them up, and it is good for chaps in the hands or feet, and to make a rugged skin smooth. The green corns of wheat being chewed, and applied to the place bitten by a mad dog, heal it; slices of wheat-bread soaked in red-rose-water, and applied to the eyes that are hot, red, inflamed, or blood-shotten, help them. Hot bread, applied for an hour at a time for three days together, perfectly healeth the kernels in the throat, commonly called the king's evil. The flour of wheat, mixed with the juice of henbane, stayeth the flux of humours to the joints, being laid thereon. The said meal, boiled in vinegar, helpeth the shrinking of the sinews, saith Pliny; and, mixed with vinegar and honey boiled together, healeth all freckles, spots, and pimples, on the face. Wheat-flour mixed with the yolk of an egg, honey, and turpentine, doth draw, cleanse, and heal, any bile, plague-fore, or foul ulcer. The bran of wheat-meal steeped in sharp vinegar, and then bound in a linen cloth, and rubbed on those places that have the scurf, morphew, scabs, or leprosy, will take them away, the body being first well purged and prepared. The decoction of the bran of wheat or barley is of good use to bathe those places that are bursten by a rupture; and the said bran boiled in good vinegar, and applied to swollen breasts, helpeth them, and stayeth all inflammations. It helpeth also the bitings of vipers and all other venomous creatures. The leaves of wheat-meal, applied with salt, take away hardness of the skin, warts, and hard knots in the flesh.

Wafers,

Wafers, put in water and drunk, stay the lask and bloody flux, and are profitably used both inwardly and outwardly for ruptures in children. Boiled in water unto a thick jelly, it stayeth spitting of blood; and, boiled with mint and butter, it helpeth hoarsenes.

### W I L L O W - T R E E. SALIX.

**GOVERNMENT AND VIRTUES.** The Moon owns it. The leaves, bark, and seed, are used to staunch bleeding at nose and mouth, spitting of blood, and all other fluxes of blood in man or woman, and to stay vomiting, and provocation thereunto, if the decoction of them in wine be drunk. It helpeth also to stay thin, hot, sharp, salt, distillations from the head upon the lungs, causing a consumption. The leaves bruised with some pepper, and drunk in wine, much help the wind-cholic. The leaves bruised, and boiled in wine and drunk, stayeth the heat of lust. The water that is gathered from the willow when it flowereth, the bark being slit, is very good for redness and dimness of sight, for films that grow over the eyes, and stay the rheums that fall into them; to provoke urine, being stopped, if it be drunk; and to clear the face and skin from spots and discolourings. Galen saith, the flowers have an admirable faculty in drying up humours, being a medicine without any sharpness or corrosion. The bark works the same effects, if used in the same manuer; and the tree hath always bark upon it, though not always flowers. The burnt ashes of the bark, being mixed with vinegar, take away warts, corns, and superfluous flesh. The decoction of the leaves or bark in wine takes away scurf, or dandriff, by washing the place with it. It is a fine cool tree, the boughs of which are very convenient to be placed in the chamber of one sick of a fever.

### W O A D. ISATIS.

**DESCRIPTION.** It hath divers large leaves, long, and somewhat broad, like those of the greater plantane, but larger, thicker, of a greenish colour, and somewhat blue; from among which leaves riseth up a lusty stalk, three or four feet high, with divers leaves set thereon; the higher the stalk riseth, the smaller are the leaves; at the top it spreadeth into divers branches, at the end of which appear very pretty little yellow flowers, which, after they pass away, come husks, long, and somewhat flat; in form they resemble a tongue; in colour they are black, and hang down wards. The seed contained within these husks, if it be a little chewed, gives an azure colour to the saliva. The root is white and long.

PLACE.

PLACE. It is sowed in fields for the benefit of it, where those that sow it cut it three times a-year.

TIME. It flowereth in June, but it is long after before the seed is ripe.

GOVERNMENT AND VIRTUES. It is a cold and dry plant of Saturn. Some people affirm the plant to be destructive to bees. They say it possefeth bees with the flux; but that I can hardly belieye, unles bees be contrary to all other creatures; I should rather think it possefeth them with the contrary disease, the herb being exceedingly drying and binding. However, if any bees be diseased thereby, the cure is to set urine by them, but set it in such a vessel that they cannot drown themselves, which may be remedied if you put pieces of cork in it. I told you the herb is so drying and binding, that it is not fit to be given inwardly. An ointment made thereof stauicheth bleeding. A plaster made thereof, and applied to the region of the spleen, takes away the hardness and pains thereof. The ointment is excellent good in such ulcers as abound with moisture, and takes away corrodung and fretting humours. It cools inflammatiuns, quencheth St. Anthony's fire, and stayeth defluxions of blood to any part of the body.

#### WOODBINE, OR HONEY-SUCKLES. *IONICERA.*

TIME. THEY flower in June, and the fruit is ripe in August.

GOVERNMENT AND VIRTUES. It is an herb of Mercury, and appropriated to the lungs; the celestial Crab claims dominion over it, neither is it a foe to the Lion. It is fitting a conserve, made of the flowers of it, were kept in every house; I know no better cure for an asthma; besides, it takes away the evil of the spleen, provokes urine, procures speedy delivery to women; helps cramps, convulsions, and palsies, and whatsoever griefs come of cold or stopping. Made into an ointment, it will clear the skin of morphew, freckles, and sun-burning, or whatsoever else discolours it.

#### WORMWOOD. *ARTEMISIA.*

KINDS. THREE wormwoods are familiar with us. Sea-wormwood hath as many names as virtues; *Seriphian, Santonicon, Belgicum, Narbonense, Xanthicum, Misnense*, and many more. The seed of this wormwood is that which usually women give their children for the worms: of all wormwoods that grow here, this is the weakest. The seeds of the common wormwood are far more prevalent than the seed of this to expel worms in children, or people of ripe age.

Of both some are weak, some are strong. The Seriphian wormseed is the weakest, and haply may prove to be fittest for weak bodies. Let such as are strong take the common wormseed, for the other will do but little good. Its due praise is this; it is weakest, therefore fitter for weak bodies. The leaves have commonly been used, but the flowery tops are the right part. These, made into a light infusion, strengthen digestion, correct acidities, and supply the place of gall, where, as in many constitutions, that is deficient.

**PLACE.** It grows familiarly in England by the sea-side.

**DESCRIPTION.** It starts up out of the earth with many round woody hoary stalks from one root; its height is four feet, or three at the least. The leaves are long, narrow, white, hoary, like southernwood, only broader and longer, in taste rather salt than bitter, because it grows so near the salt water: at the joints with the leaves, toward the tops, it bears little yellow flowers. The root lies deep, and is woody.

Common wormwood I need not describe.

**DESCRIPTION OF ROMAN WORMWOOD.** The stalks are slender, and shorter than the common wormwood by one foot at least; the leaves are more finely cut and divided than they are, but something smaller; both leaves and stalks are hoary; the flowers of a pale yellow colour; it is altogether like the common wormwood, save only that it is smaller, not so bitter, and of a sweeter smell.

**PLACE.** It groweth upon the tops of the mountains; but is usually nurst up in gardens for the use of the apothecaries in London.

**TIME.** All wormwoods usually flower in August, a little sooner or later.

**GOVERNMENT AND VIRTUES.** Wormwood is an herb of Mars. It is hot and dry in the first degree, viz. just as hot as your blood, and no hotter. It remedies the evils choler can inflict on the body of man by sympathy; it helps the evils Venus produces by antipathy; and it cleanseth the body of choler. It provokes urine, helps surfeits, swellings in the belly; it causeth an appetite for meat, because Mars rules the attractive faculty in man. The Sun never shone upon a better herb for the yellow jaundice than this. Take the flowers of wormwood, rosemary, and blackthorn, of each a like quantity, half that quantity of saffron, boil this in Rhenish-wine, but put not in the saffron till it is almost boiled: this is the way to keep a man's body in health, appointed by Camerarius, in his book, intitled *Hortus Medicus*. Besides all this, wormwood provokes the terms. Wormwood, being an herb of Mars, is a present remedy for the biting of rats and mice. Mushrooms are under the dominion of Saturn; if any have poisoned himself by eating them,

wormwood,

wormwood, an herb of Mars, cures him, because Mars is exalted in Capricorn the house of Saturn; and this it doth by sympathy. Wheals, pushes, black and blue spots, coming either by bruises or beatings, wormwood, the herb of Mars, helps. Mars eradicates all diseases in the throat by his herbs, (of which wormwood is one,) and this by antipathy. The eyes are under the luminaries: the right eye of a man, and the left eye of a woman, the Sun claims dominion over; the left eye of a man, and the right of a woman, are the privilege of the Moon: wormwood, an herb of Mars, cures both. Suppose a man be bitten or stung by a martial creature, imagine a wasp, a-hornet, or scorpion; wormwood, an herb of Mars, gives you a present cure. Mix a little wormwood with your ink, and neither rats nor mice will touch the paper that is written with it. Wormwood is a present cure for the cholic. Moths are under the dominion of Mars; his herb, wormwood, being laid amongst clothes, will hinder moths from hurting them. Wormwood is good for an ague. A draught of wormwood-beer, taken every morning, is a certain remedy for a stinking breath. It likewise cures dimness of sight by antipathy.

WOLF'S BANE. ANONITUM. See p. 71.

YARROW. ACHILLEA.

NAMES. CALLED also nose-bleed, mil-foil, and thousand-leaf.

DESCRIPTION. It hath many long leaves spread upon the ground, and finely cut and divided into many small parts: Its flowers are white, upon divers green stalks which rise from among the leaves.

PLACE. It is frequent in all pastures.

TIME. It flowereth not until the latter end of August.

GOVERNMENT AND VIRTUES. It is under the influence of Venus. An ointment of it cures wounds, and is most fit for such as have inflammations. It stops the bloody flux; the ointment of it is not only good for green wounds, but also for ulcers and fistulas, especially such as abound with moisture. It stayeth the shedding of hair, the head being bathed with the decoction of it. Inwardly taken, it helps the retentive faculty of the stomach, and such as cannot hold their water. The leaves, chewed, ease the tooth-ach; and these virtues put together shew the herb to be drying and binding. There is an ancient charm for curing tertian agues with yarrow. A leaf of it is to be pulled off with the left hand, pronouncing at the same time the sick man's name; and this leaf is to be taken.

The

The same thing has been said of feverfew; for, in old times, names of plants, as well as now, were too much confounded. The feverfew seems best for the purpose.

### YUCCA, OR ADAM's NEEDLE. YUCCA.

**DESCRIPTION.** THIS Indian plant hath a thick tuberous root, spreading in time into many tuberous heads, whence shoot forth many long, hard, and hollow, leaves, very sharp pointed, compassing one another at the bottom, of a greyish-green colour, abiding continually, or seldom falling away, with sundry hard threads running in them, and, being withered, become pliant to bind things. From the midst thereof springeth forth a strong round stalk, divided into sundry branches, whereon stand divers somewhat-large white flowers, hanging downwards, consisting of six leaves with divers veins, of a weak reddish or blueish colour, spread on the back of three outer leaves, from the middle to the bottom, not reaching to the edge of any leaf; which abide not long, but quickly fall away.

**PLACE AND TIME.** It groweth in divers places of the West-Indies, as also in Virginia and New England; and flowers about the latter end of July.

**VIRTUES.** There hath no property hereof conducible to physical uses as yet been heard of, but some of its vices. Yet the natives of Virginia use, for bread, the roots hereof. The raw juice is dangerous, if not deadly. It is very probable that the Indians used to poison the heads of their darts with this juice, which they usually keep by them for that purpose.

OF GATHERING, DRYING, AND PRESERVING, PLANTS,  
HERBS, AND FLOWERS.

## THE LEAVES OF HERBS OR TREES.

CHUSE only such as are green and full of juice, pick them carefully, and cast away such as are declining, for they will putrefy the rest.

Note in what place they most delight to grow, and gather them there; for betony that grows in the shade is far better than that which grows in the sun, because it delights in the shade: so also such herbs as delight to grow near the water should be gathered near the water, though you may find some of them upon dry ground.

The leaves of such herbs as run up to seed, are not so good when they are in flower as before, (some few excepted, the leaves of which are seldom or never used:) in such cases, if through ignorance they were not known, or through negligence forgotten, you had better take the top and the flower than the leaf.

Dry them well in the sun, and not in the shade, for, if the sun draw away the virtues of herbs, it must needs do the like by hay; which the experience of every country farmer will explode as a vulgar error.

Let the planet that governs the herb be angular, and the stronger the better. In herbs of Saturn, let Saturn be in the ascendant; in herbs of Mars, let Mars be in the mid-heaven, for in those houses they delight: let the Moon apply to them by good aspect, and let her not be in the houses of their enemies; if you cannot well stay till she apply to them, let her be with a fixed star of their nature.\*

Having well dried them, put them up in brown-paper bags, and press them not too hard together, and keep them in a dry place near the fire. As for the duration of dried herbs, a just time cannot be given, for, first, such as grow upon dry grounds will keep better than such as grow on moist; secondly, such herbs as are full of juice will not keep so long as such as are drier; thirdly, such herbs as are well dried will keep longer than such as are ill dried. Yet by this you may know when they are corrupted, viz. by their loss of colour, or smell, or both; and if they be corrupted, reason will tell you that they must needs corrupt the bodies of those people that take them. Remember to gather all the leaves in the hour of that planet that governs them.

\* For this most wonderful operation of the planetary system on plants, herbs, &c. and indeed upon all things sublunary, see my ILLUSTRATION of the OCCULT SCIENCES, or DOCTRINE of the STARS.

## O F F L O W E R S.

THE flower, which is the beauty of the plant, and of none of the least use in physic, groweth yearly, and is to be gathered when it is in its prime.

As for the time of gathering them, let the planetary hour, and the plant they come of, be observed, as above directed; as for the time of day, let it be when the sun shines upon them that they may be dry; for, if you gather either flowers or herbs when they are wet or dewy, they will not keep. Dry them well in the sun, and keep them in papers near the fire. So long as they retain their colour and smell, they are good; either of them being gone, so is their virtue also.

## O F S E E D S.

THE seed is that part of the plant which is endued with a faculty to bring forth its like, and it contains potentially the whole plant itself.

As for place, let them be gathered from the places where they delight to grow. Let them be fully ripe when they are gathered, and forget not the celestial harmony before-mentioned, for I have found by experience that their virtues are twice as great at such times as others: there is an appointed time for every thing under the sun. When you have gathered them, dry them a little in the sun before you lay them up. You need not be so careful of keeping them so near the fire as the other before-mentioned, because they are fuller of spirit, and therefore not subject to corrupt. As for the time of their duration, it is palpable they will keep a great many years; yet they are best the first year, and this I make appear by a good argument: they will grow soonest the first year they be set, therefore then are they in their prime, and it is an easy matter to renew them yearly.

## O F R O O T S.

OF roots, chuse such as are neither rotten nor worm-eaten, but proper in their taste, colour, and smell; such as exceed neither in softness nor hardness.

Give me leave here to deny the vulgar opinion, that the sap falls down into the root in the autumn, and rises again in the spring, as men go to bed at night, and rise again in the morning, which idle tale of untruth is so grounded in the heads, not only of the vulgar, but also of the learned, that men cannot drive it out by reason. If the sap fall into the root in the fall of the leaf, and lie there all the winter,

ter, then must the root grow only in the winter, as experience witnesseth: but the root grows not at all in winter, as the same experience teacheth, but only in the summer. For example: If you set an apple-kernel in the spring, it will grow at a pretty bigness in that summer, and be no bigger next spring: the truth is, when the Sun declines from the tropic of Cancer, the sap begins to congeal both in root and branch; when he toucheth the tropic of Capricorn, and ascends to us-ward, it begins to get thin again by degrees, as it congealed:

The drier time you gather your roots in, the better they are; for they have the less excrementitious moisture in them. Such roots as are soft should be dried in the sun, or else hang them in the chimney corner upon a string: as for such as are hard, you may dry them any where. Such roots as are large, will keep longer than such as are small, yet most of them will keep a year. Such roots as are soft should be always kept near the fire; and take this general rule for it: if in winter you find any of your roots, herbs, or flowers, begin to grow moist, as many times they will, (for it is best to look to them once a month,) dry them by a very gentle fire; or, if you can with convenience keep them near the fire, you may save this trouble.

#### O F B A R K S.

BARKS which physicians use in medicine are of three sorts: of fruits, of roots, of boughs.

The barks of fruits are to be taken when the fruits are full ripe, as oranges, lemons, &c. The barks of trees are best gathered in the spring, if it be of great trees, as oaks, or the like; because then they come easiest off, and so you may dry them if you please: but your best way is to gather all barks only for present use.

As for the bark of roots, it is thus to be gotten: Take the roots of such herbs as have pith in them, as parsley, fennel, &c. slit them in the middle, and when you have taken out the pith (which you may easily and quickly do) that which remains is called the bark, and is only to be used.

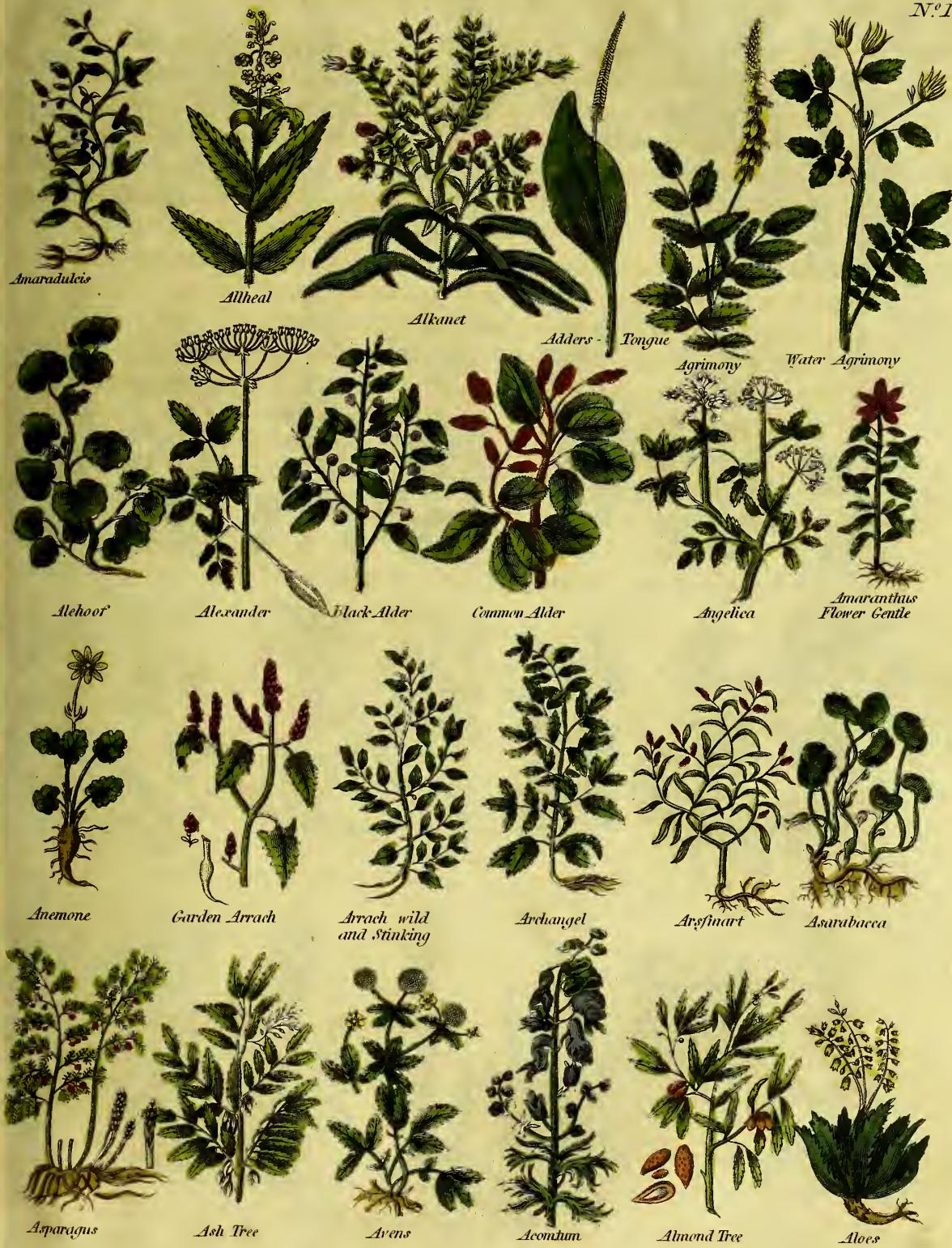
#### O F J U I C E S.

JUICES are to be pressed out of herbs when they are young and tender, and also of some stalks, and tender tops of herbs and plants, and also of some flowers.

Having gathered the herb you would preserve the juice of, when it is very dry, bruise it well in a stone mortar with a wooden pestle; then, having put it into a canvas bag, press it hard in a press; then take the juice, and clarify it.

When you have clarified it, and it is cold, put it into a glass, and put so much oil on it as will cover it the thickness of two fingers: the oil will swim at top, and so keep the air from coming to putrefy it; or, instead of oil, when you have clarified the juice as before, boil it over the fire till (when cold) it be the thickness of honey: then tie it down close, and keep it for use.

Whatever you gather of plants, herbs, fruits, flowers, roots, barks, seeds, &c. for medicinal purposes, either for distillation, syrups, juleps, decoctions, oils, electuaries, conserves, preserves, ointments, and the like, must be gathered when they are in the greatest vigour and fullest perfection; for in that state only are they fit to be applied for the restoration and preservation of our health; and, when they are applied, let it be done under the sympathetic influence of planets participating in the same nature; the benefits of which are so amply demonstrated in my Display of the Occult Sciences.

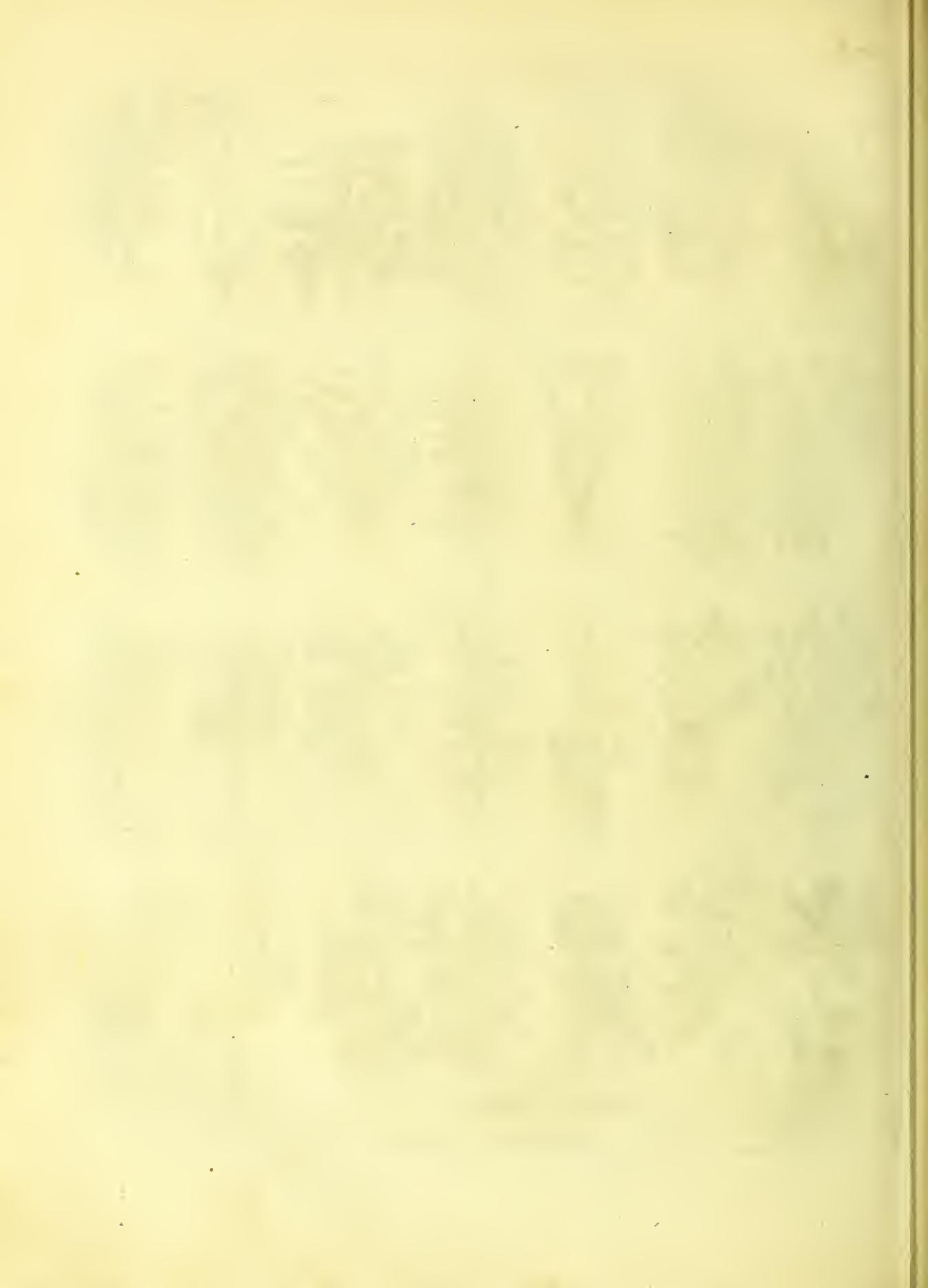




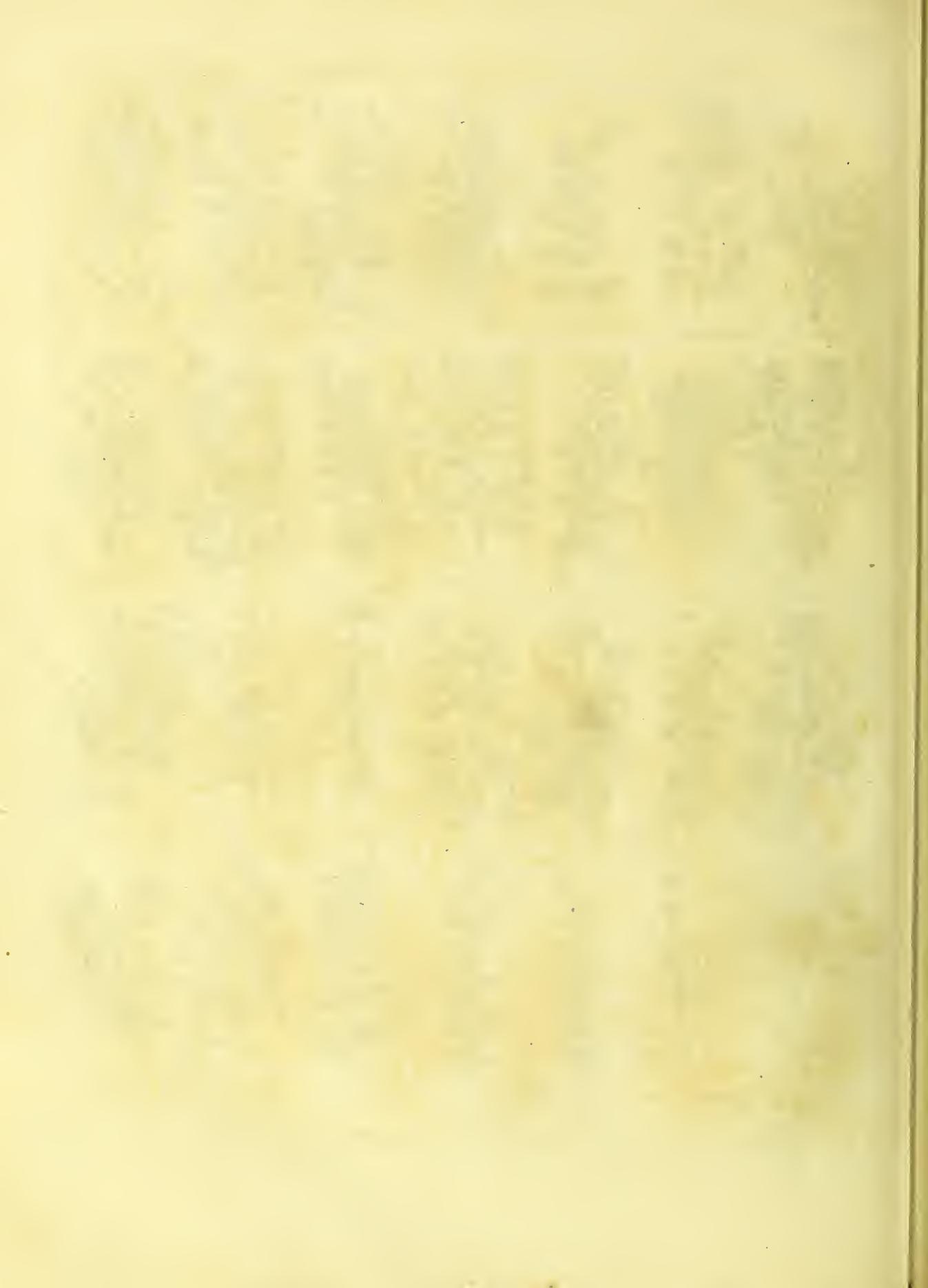




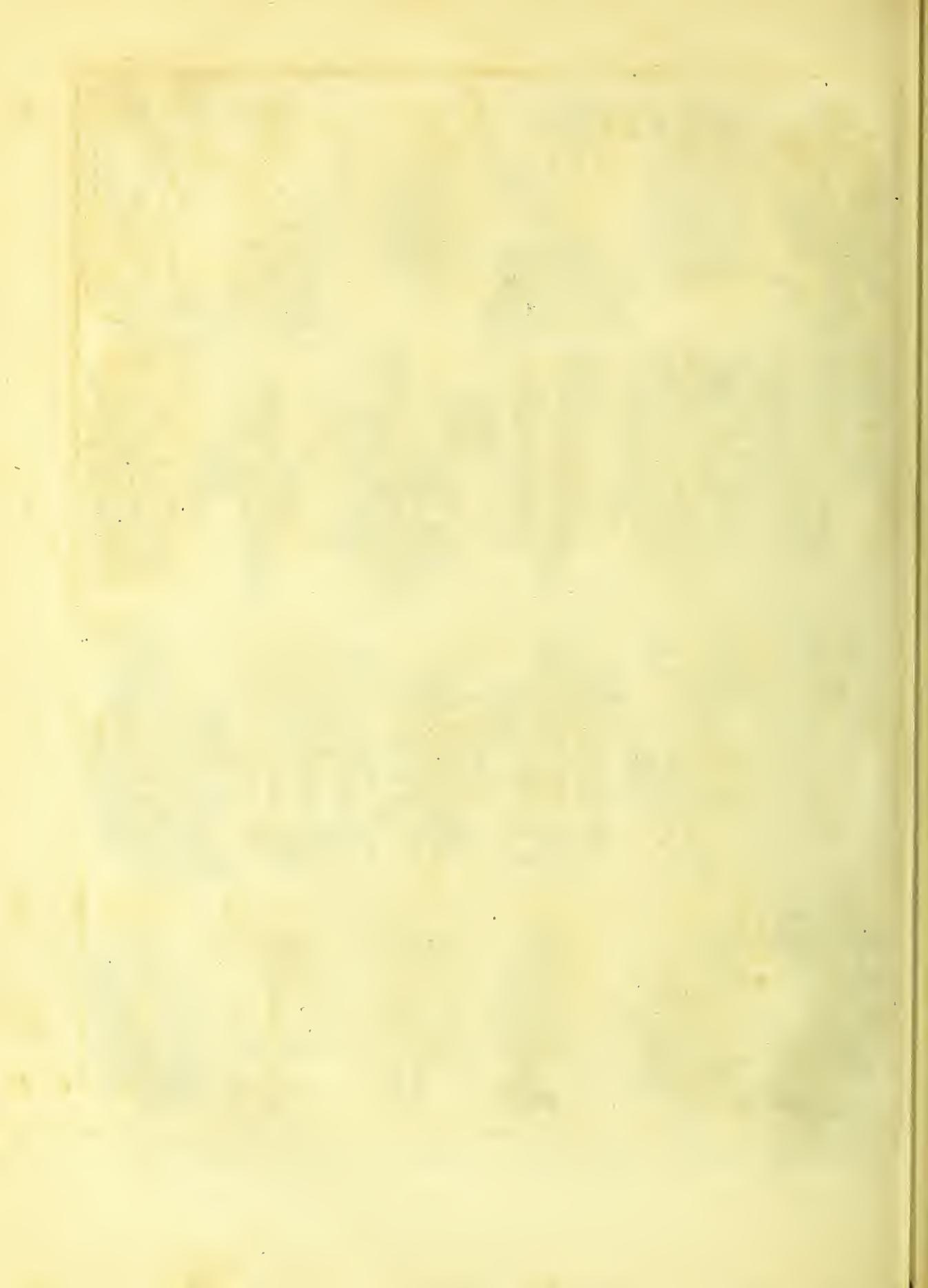




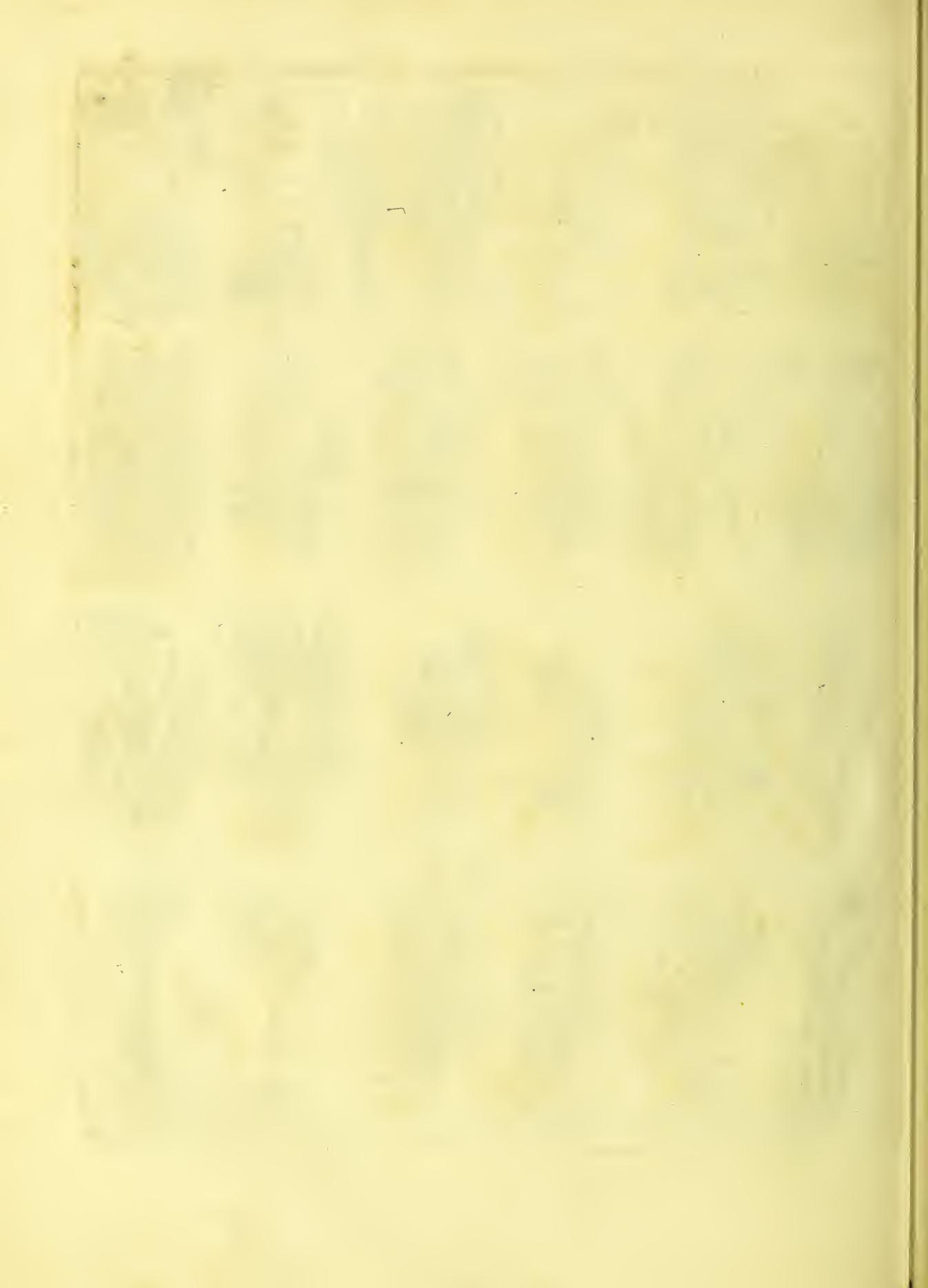




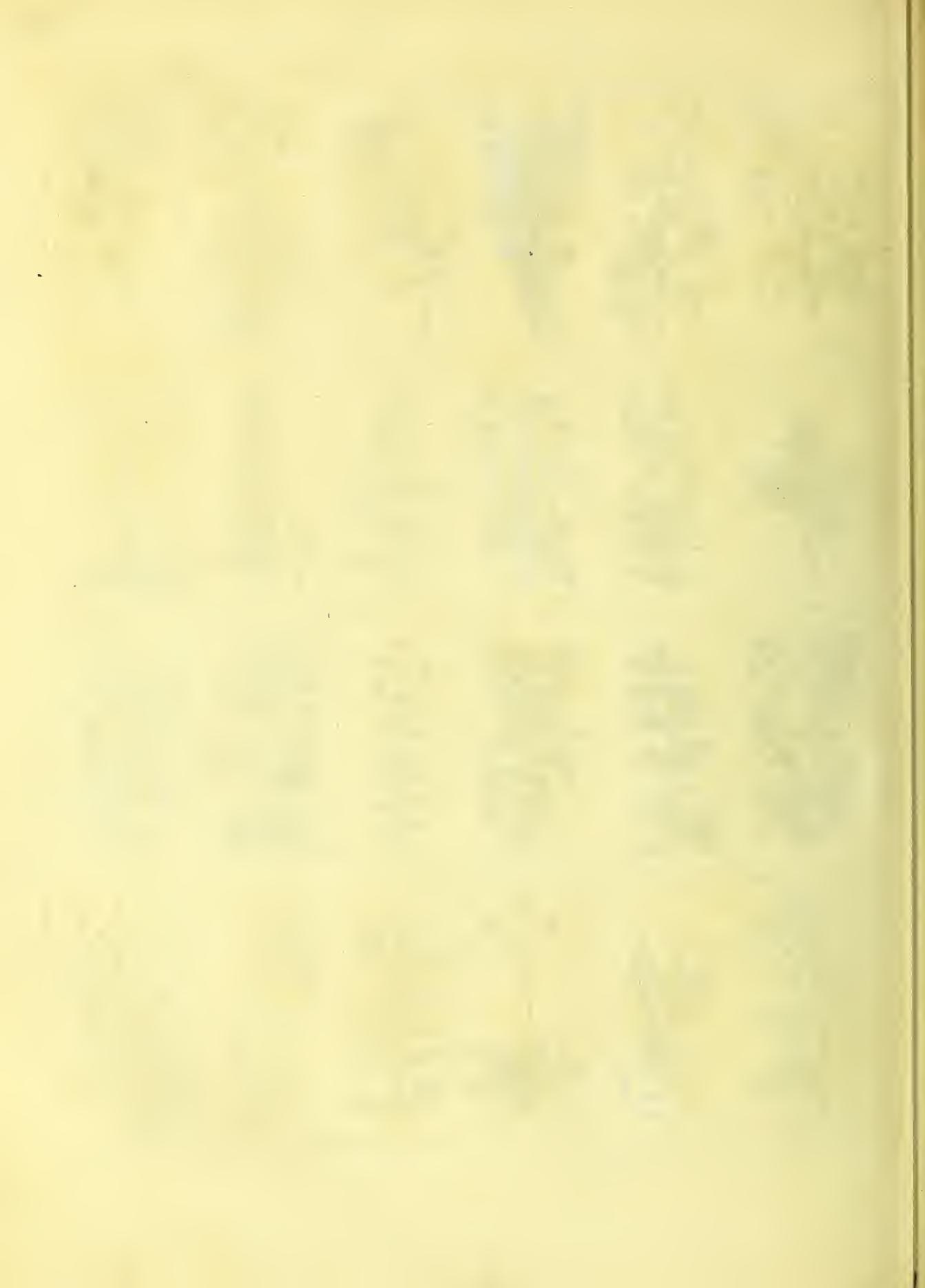




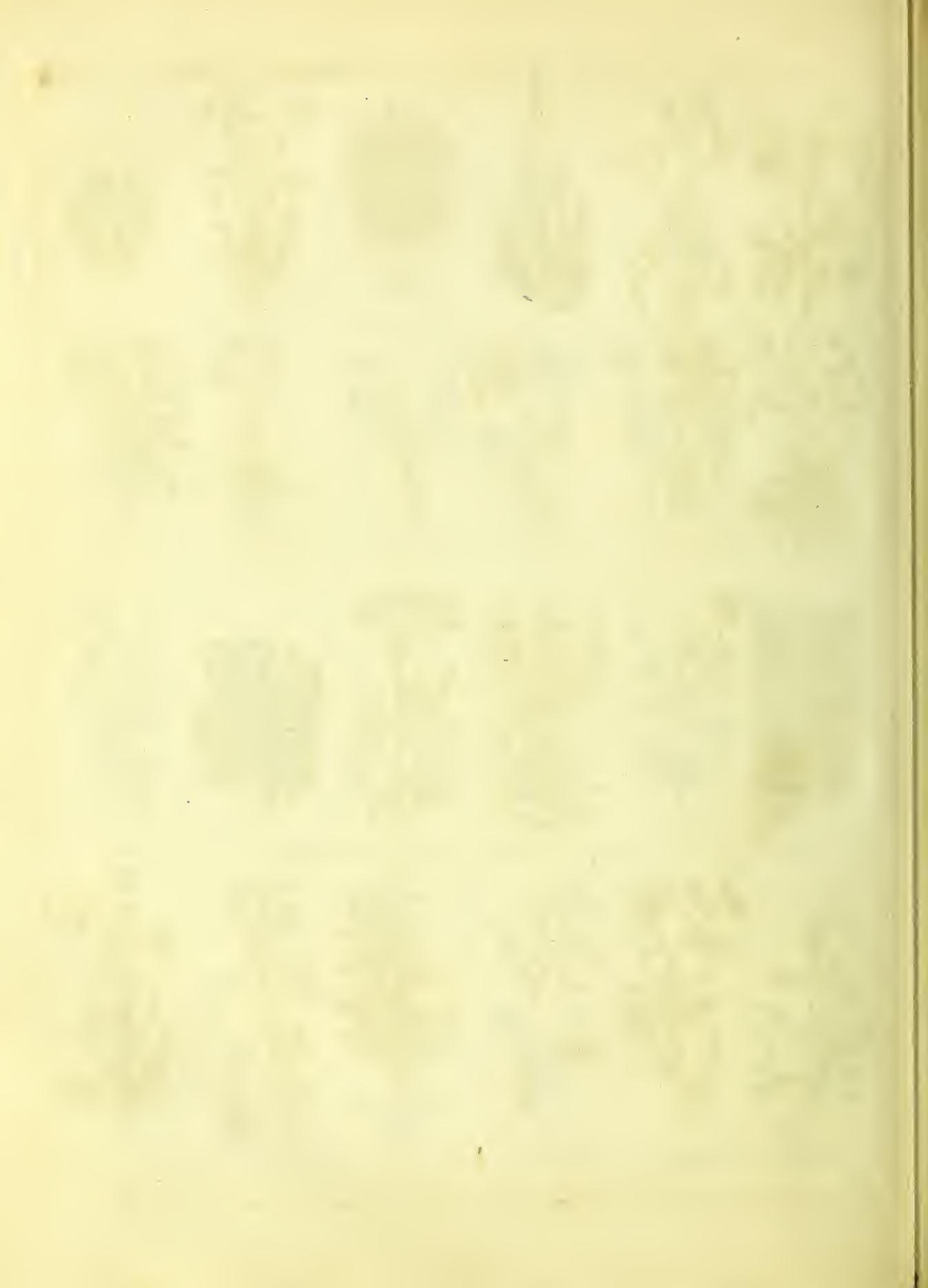




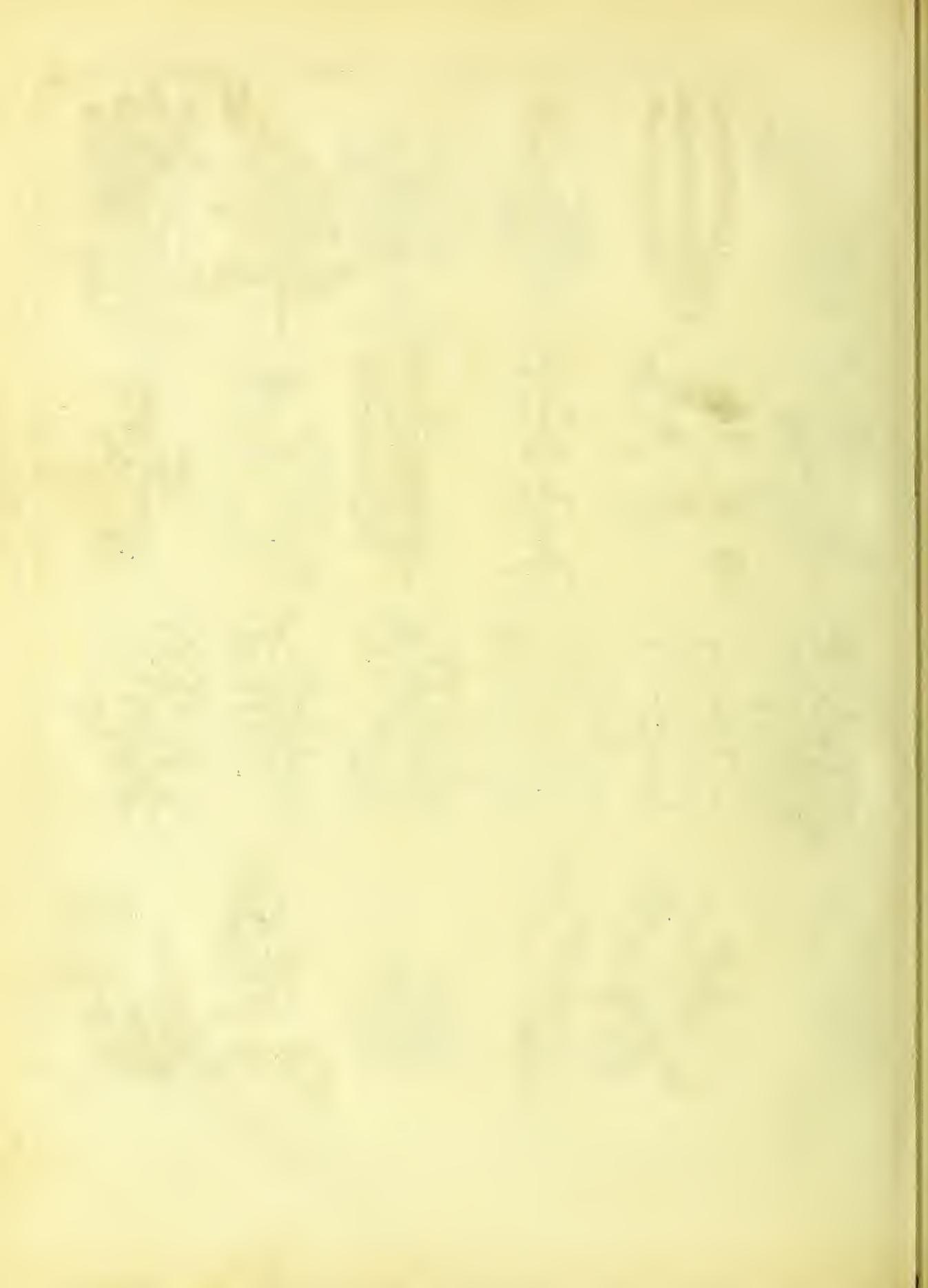


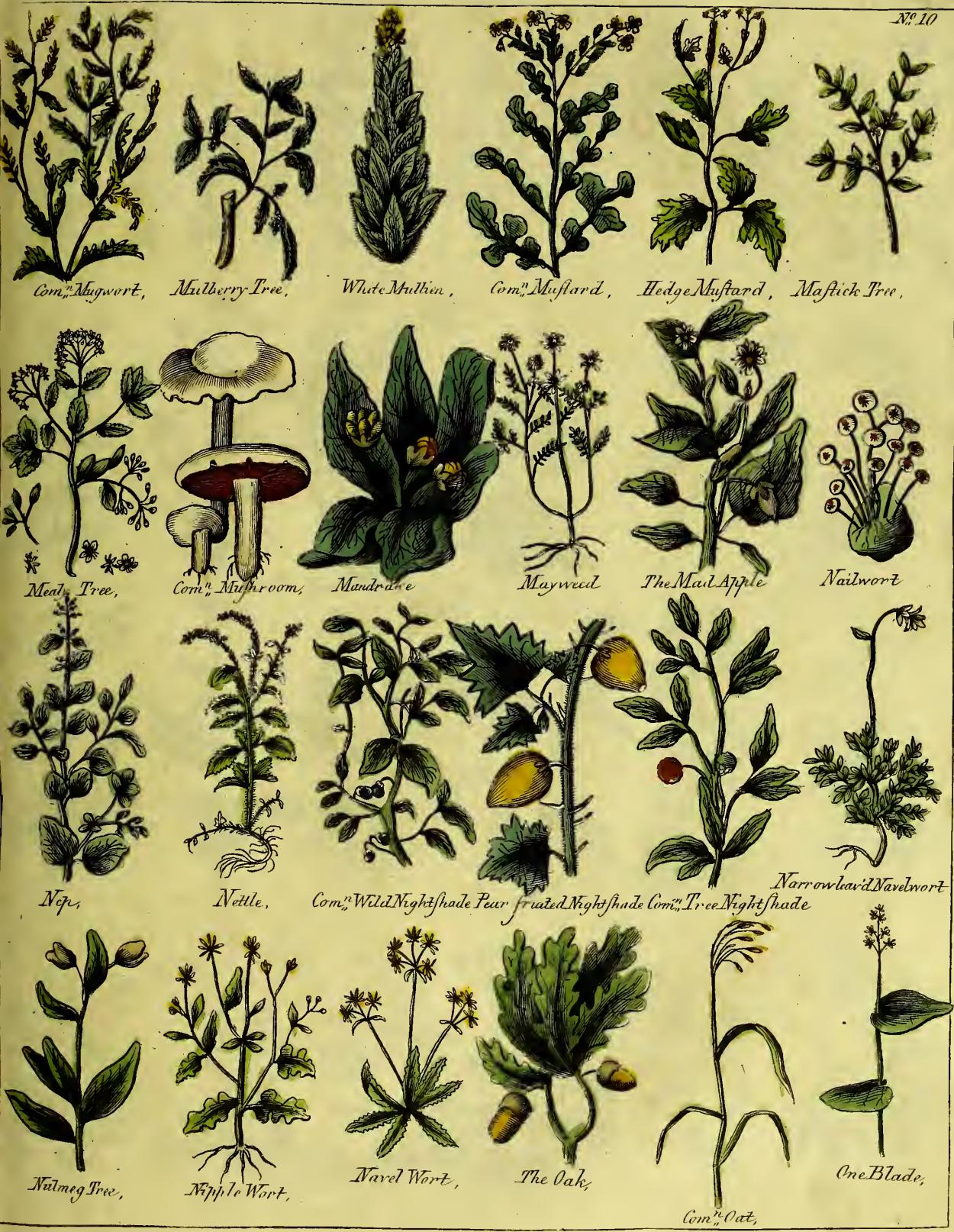




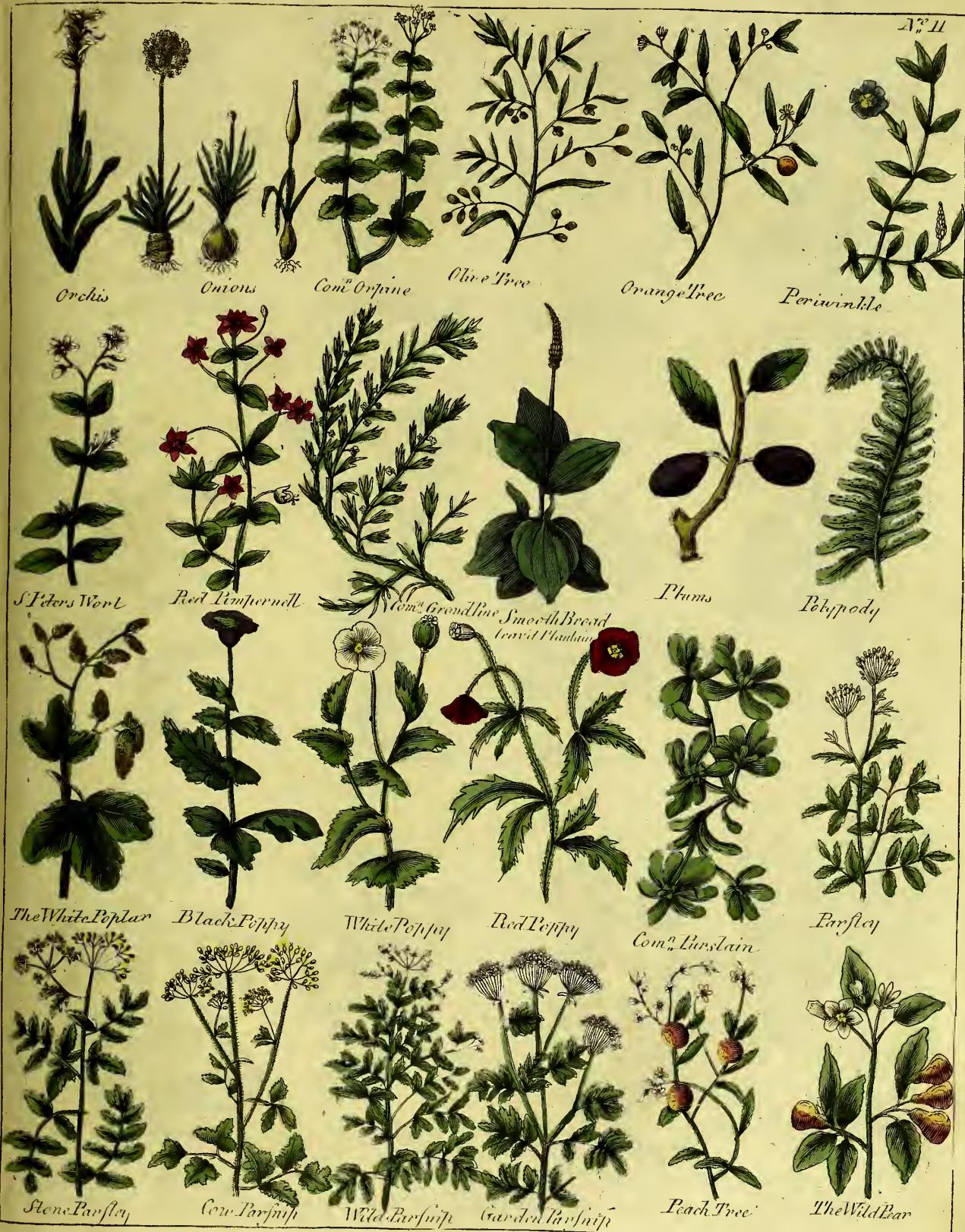


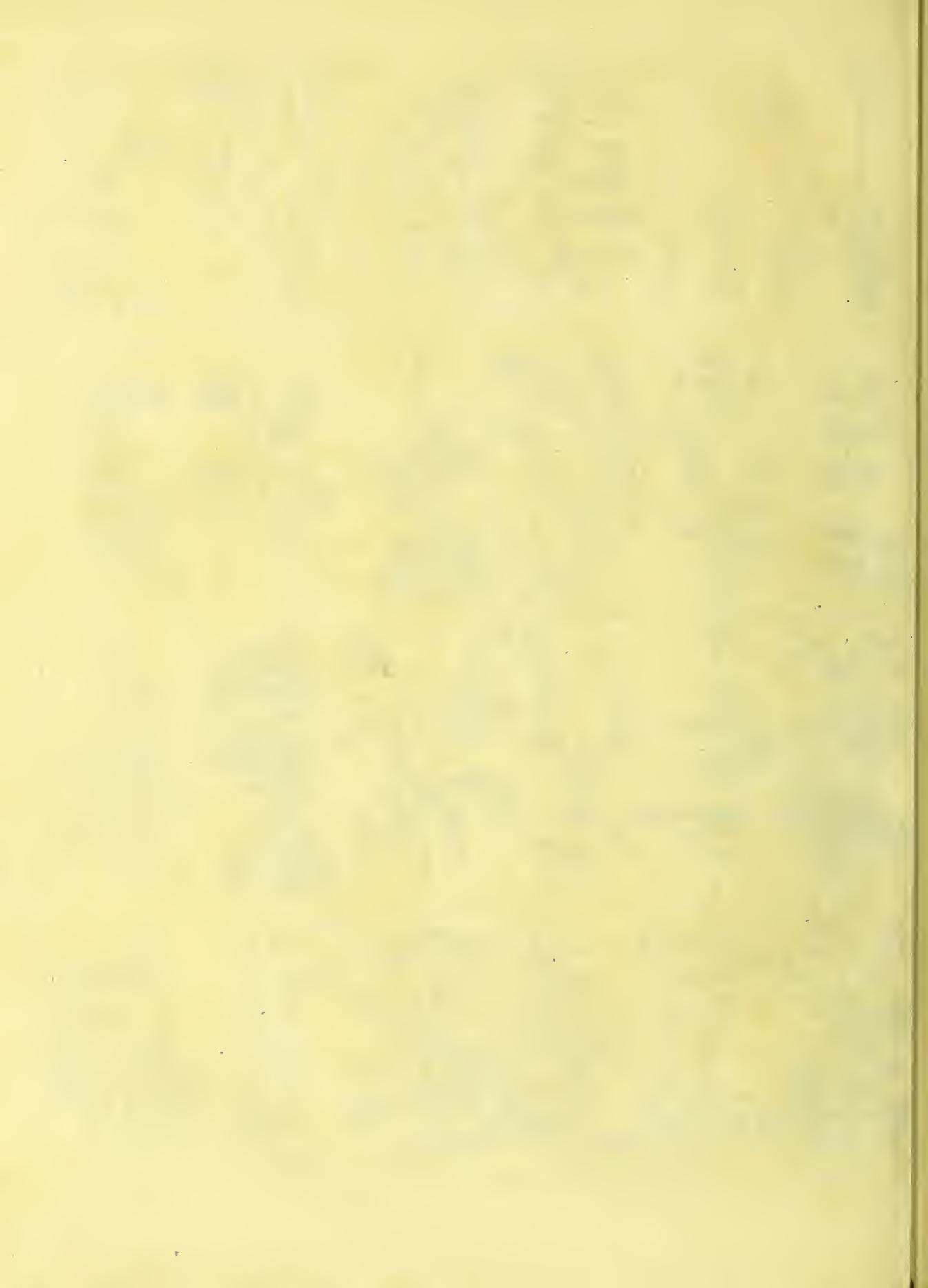














Prickly Asparagus



Bramble



Blites



Borage



Bugloss



Blue Bottle



Burnet



Butter Bur



Burdock



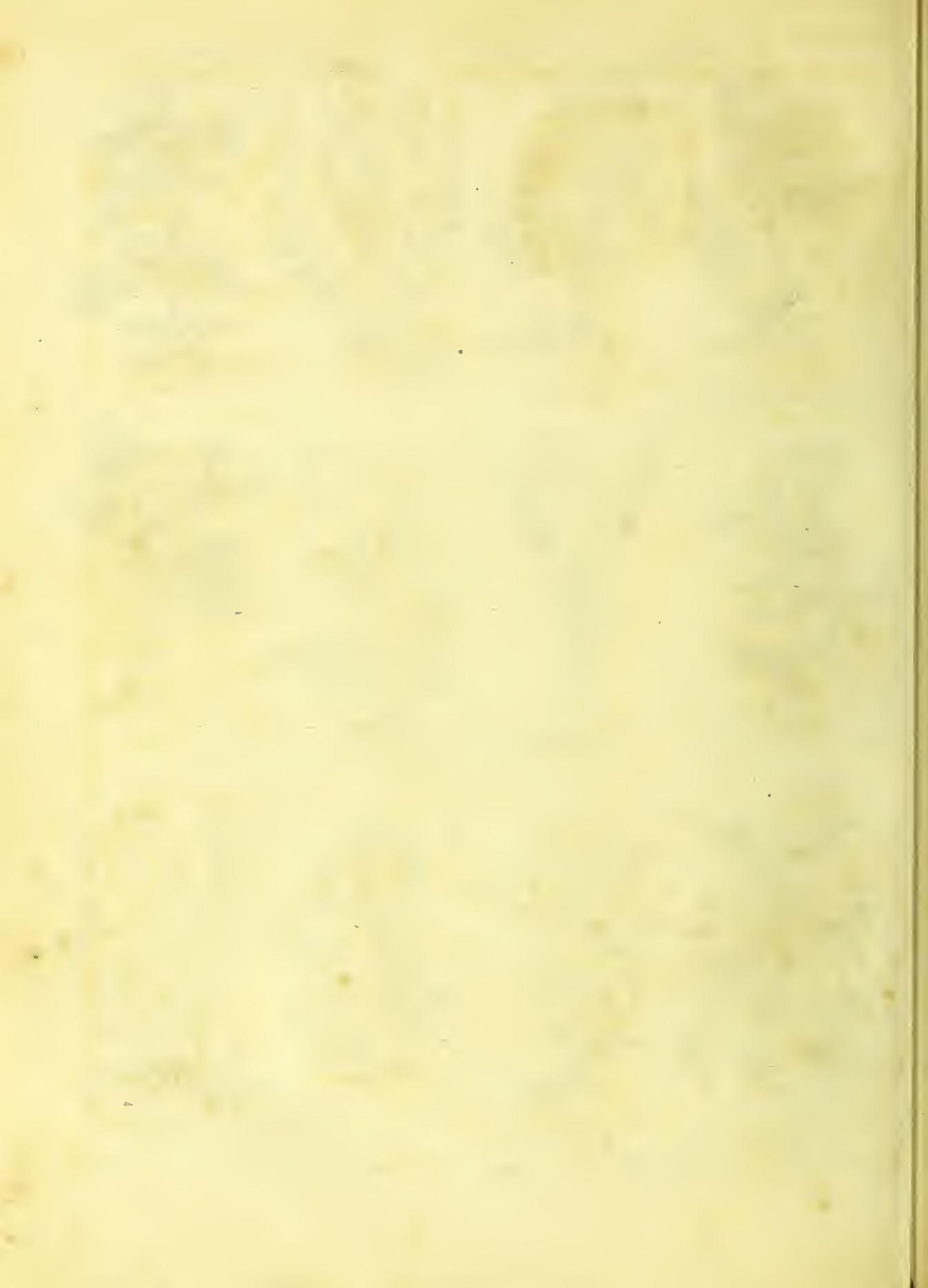
Buckwheat



Black and wheat



Male Balsam tree





Female Balsam Tree



Cabbage



Colewort



Red Colewort



Sea Colewort



Carramint



Chamomile



Caltrop



Wild Campion



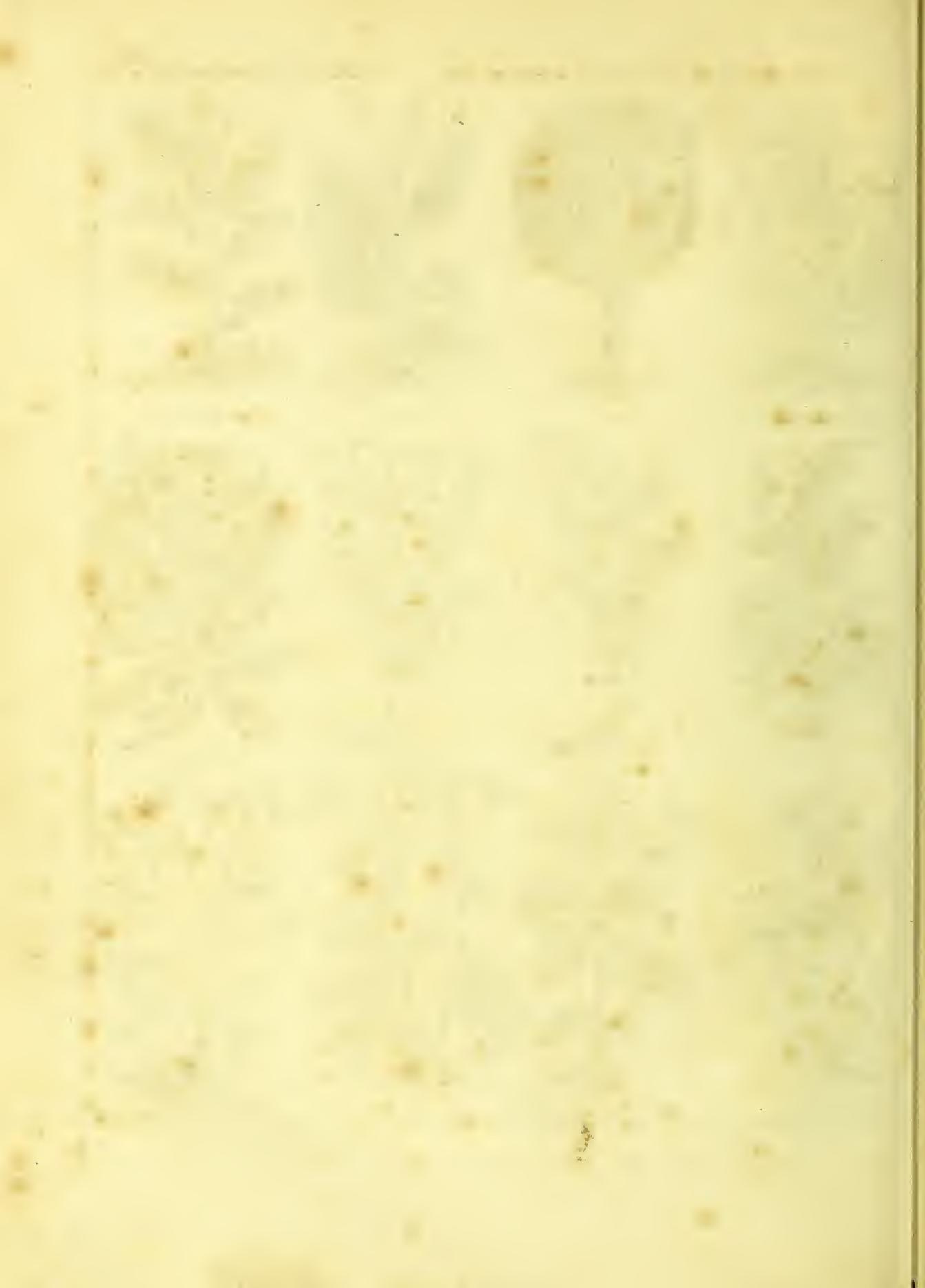
Carduus benedictus



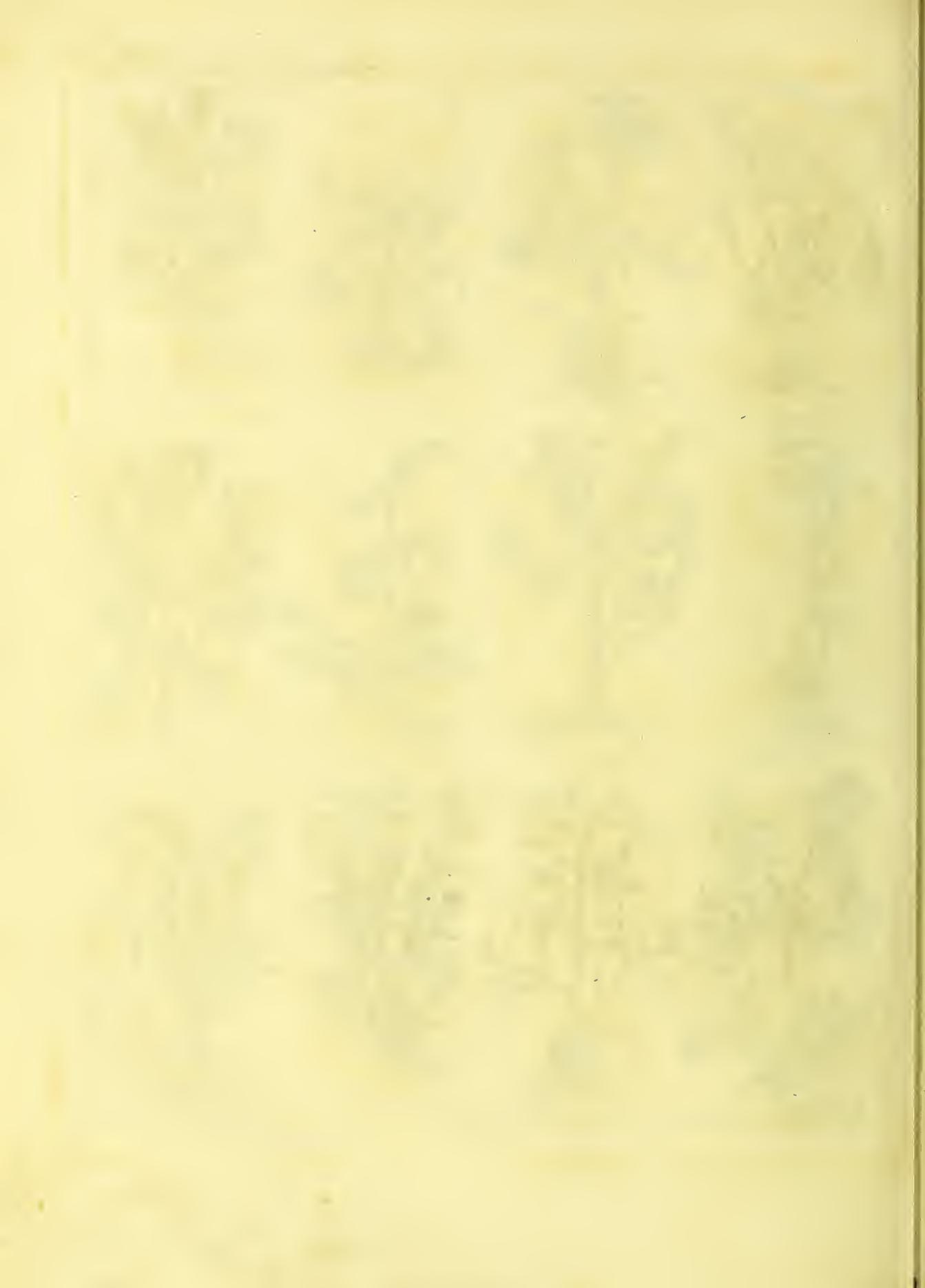
Red Carrot



Yellow Carrot









Chick-pease.



Sheep's Chick-pease.



White Cinquefoil.



Red Cinquefoil.



Lives.



Clary.



Wild Clary.



Cleavers.



Clowns Woundwort.



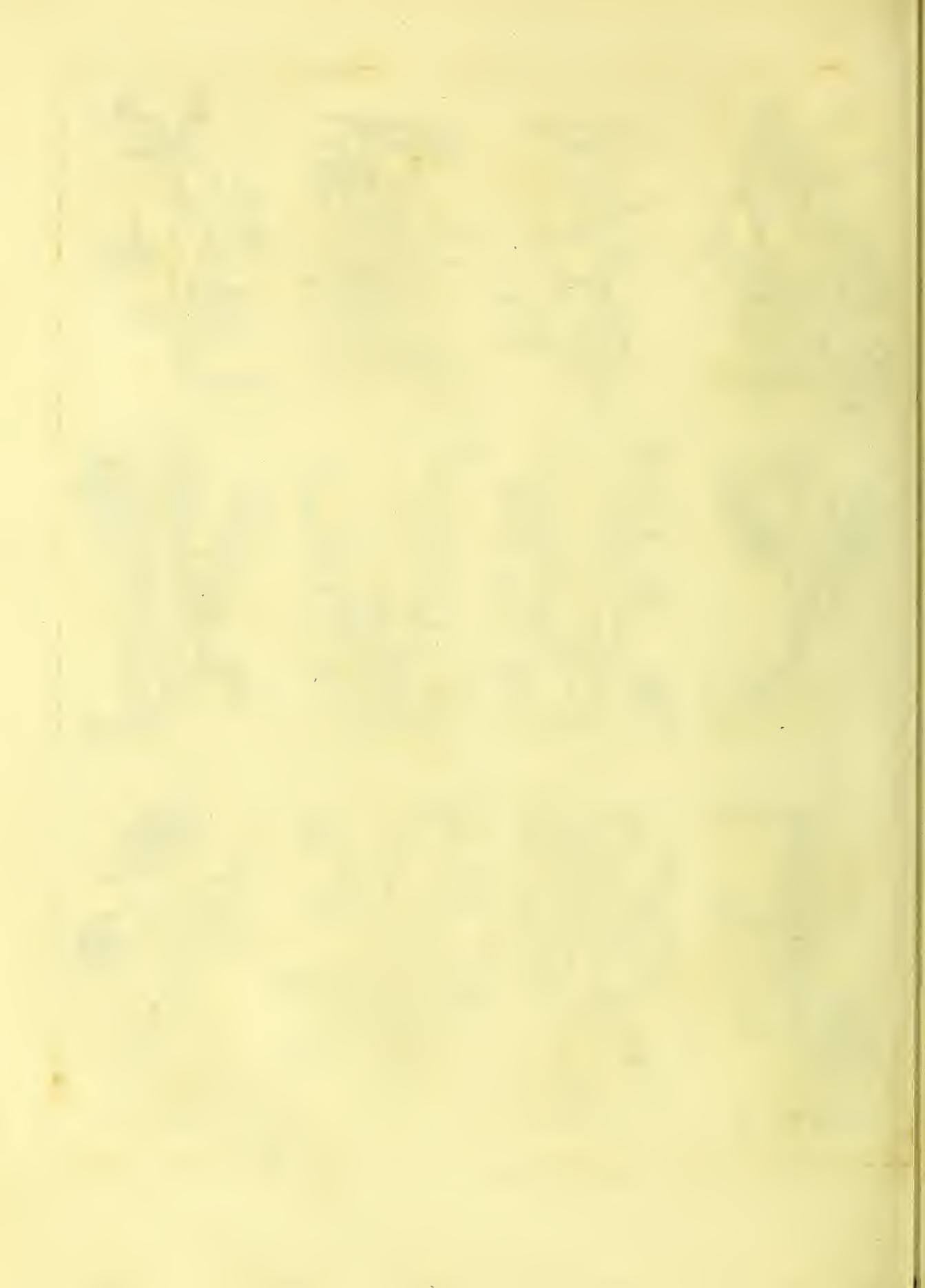
Cockshead.



Columbine.



Coltsfoot.





Comfrey.



Carob Tree.



False Dictamnum.



Gold Maidenhair.



Pettitory of Spain.



Pettitory of the Wall.



Penny Royal.



Female Piney.



Pepperwort.



Primroses.

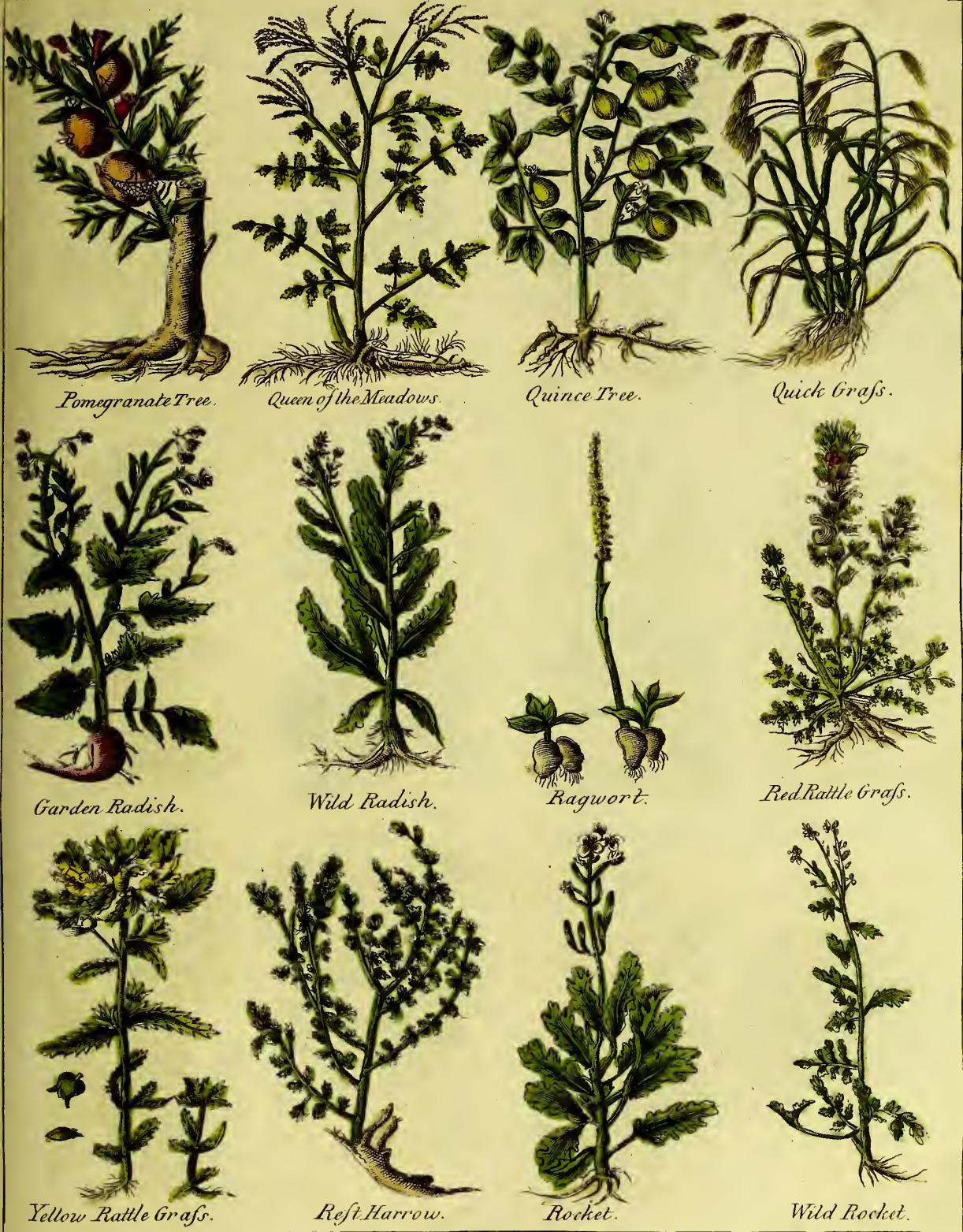


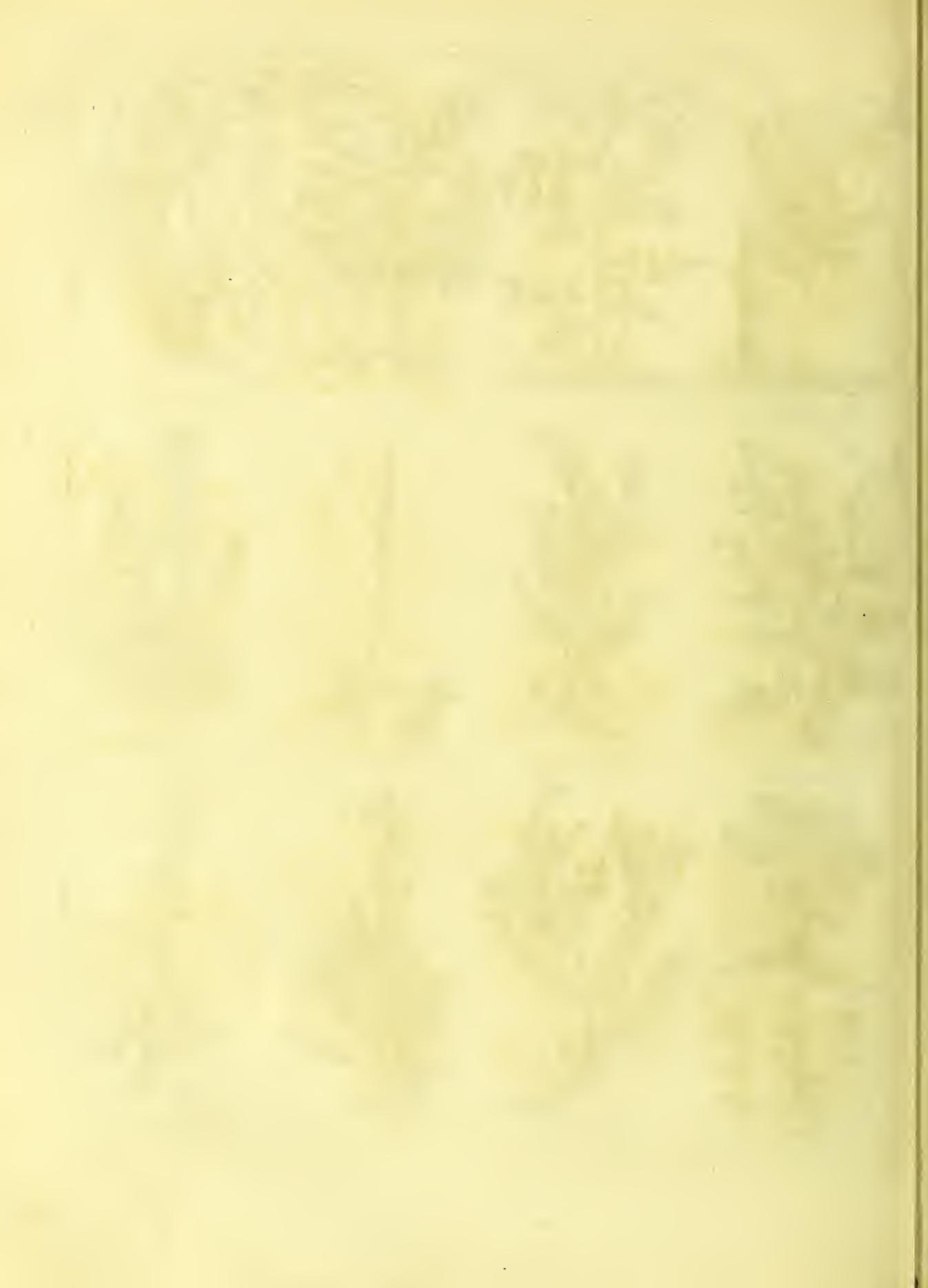
Privet.



Pomecilion Tree.









Winter Rocket.



Male Pioney.



Roses.



Rosa Solis.



Rosemary.



Rhubarb



Monks Rhubarb.



Bastard Rhubarb.



Small Bastard Rhubarb.



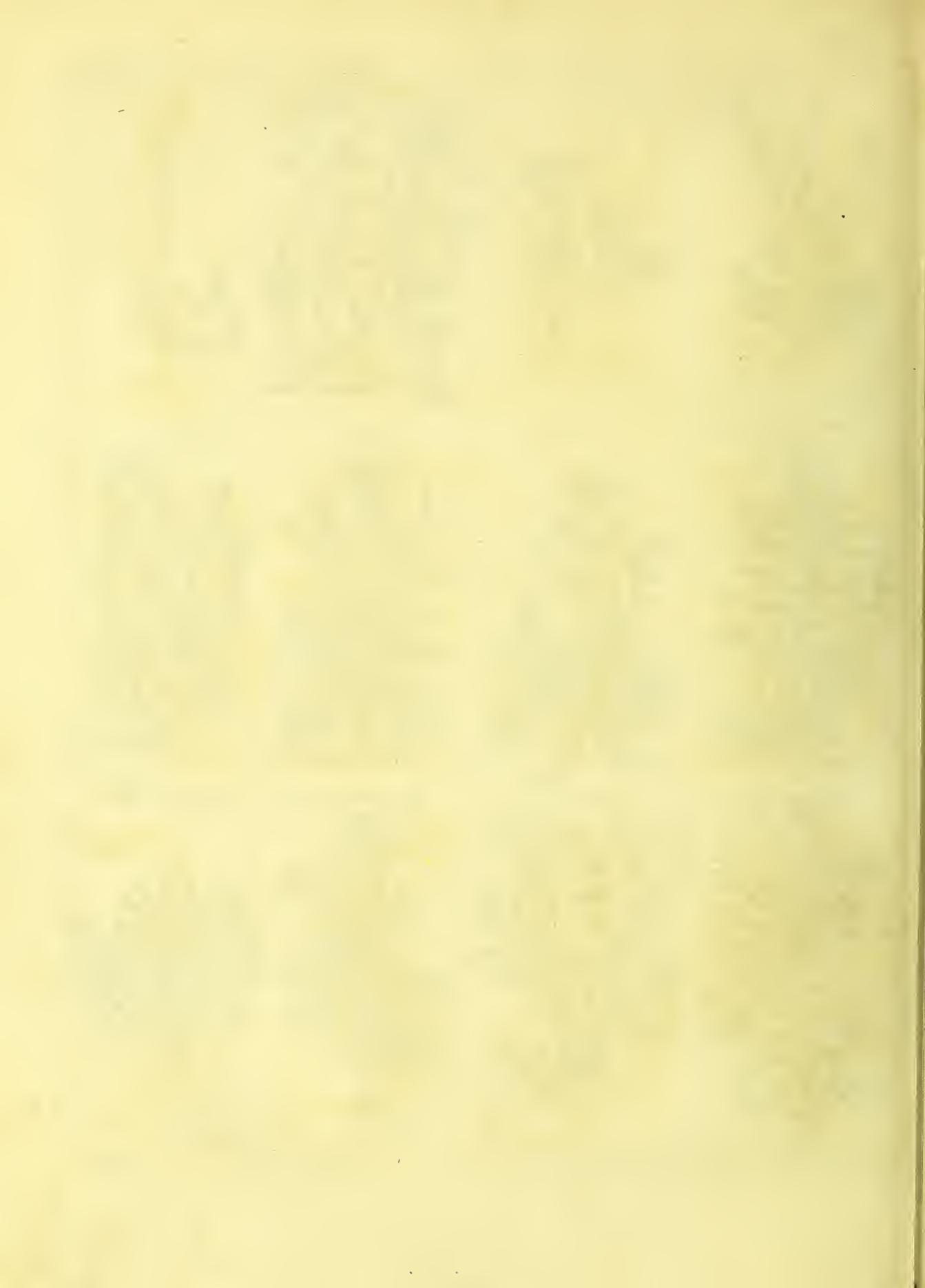
Garden Rue.



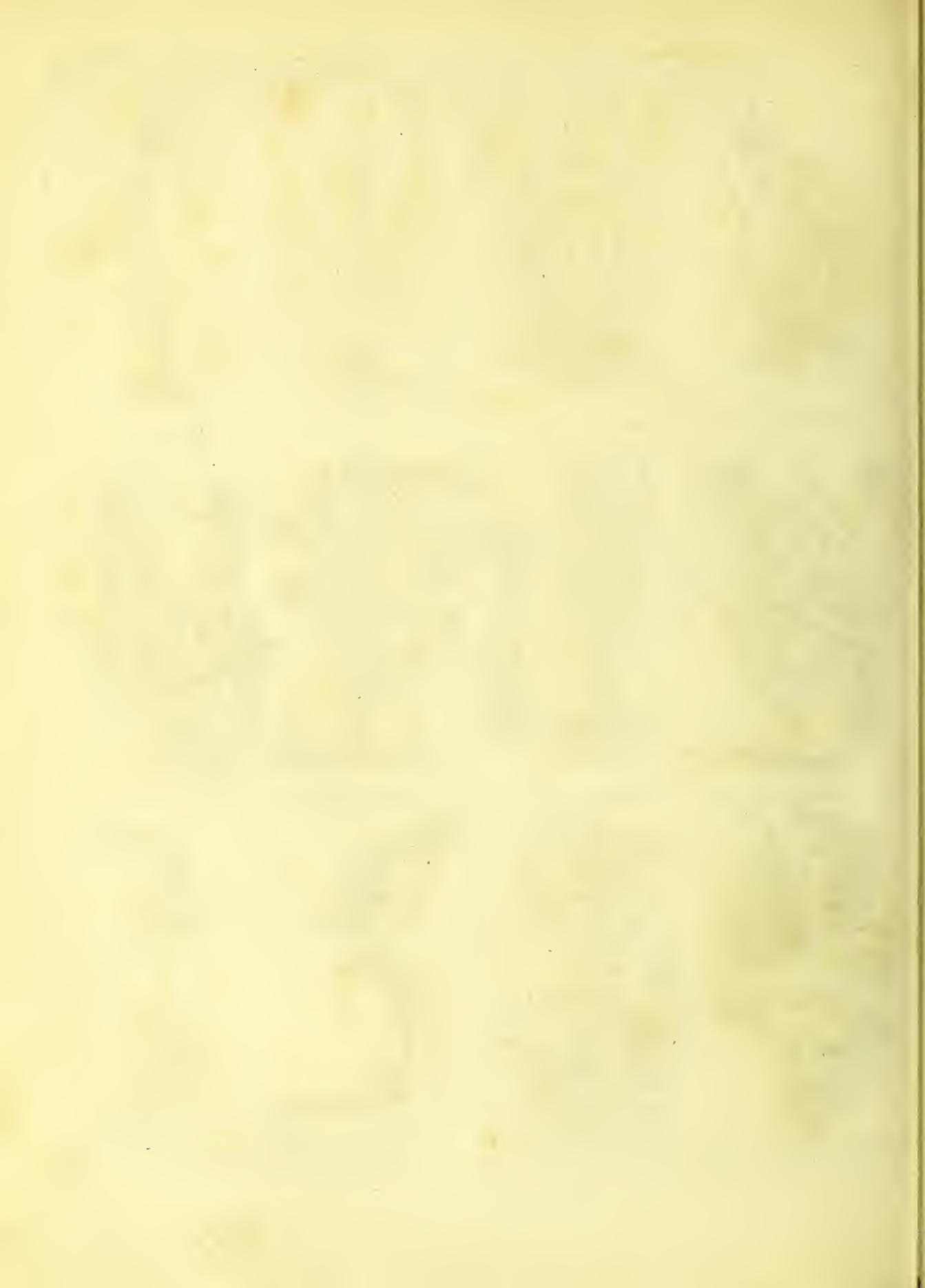
Meadow Rue.



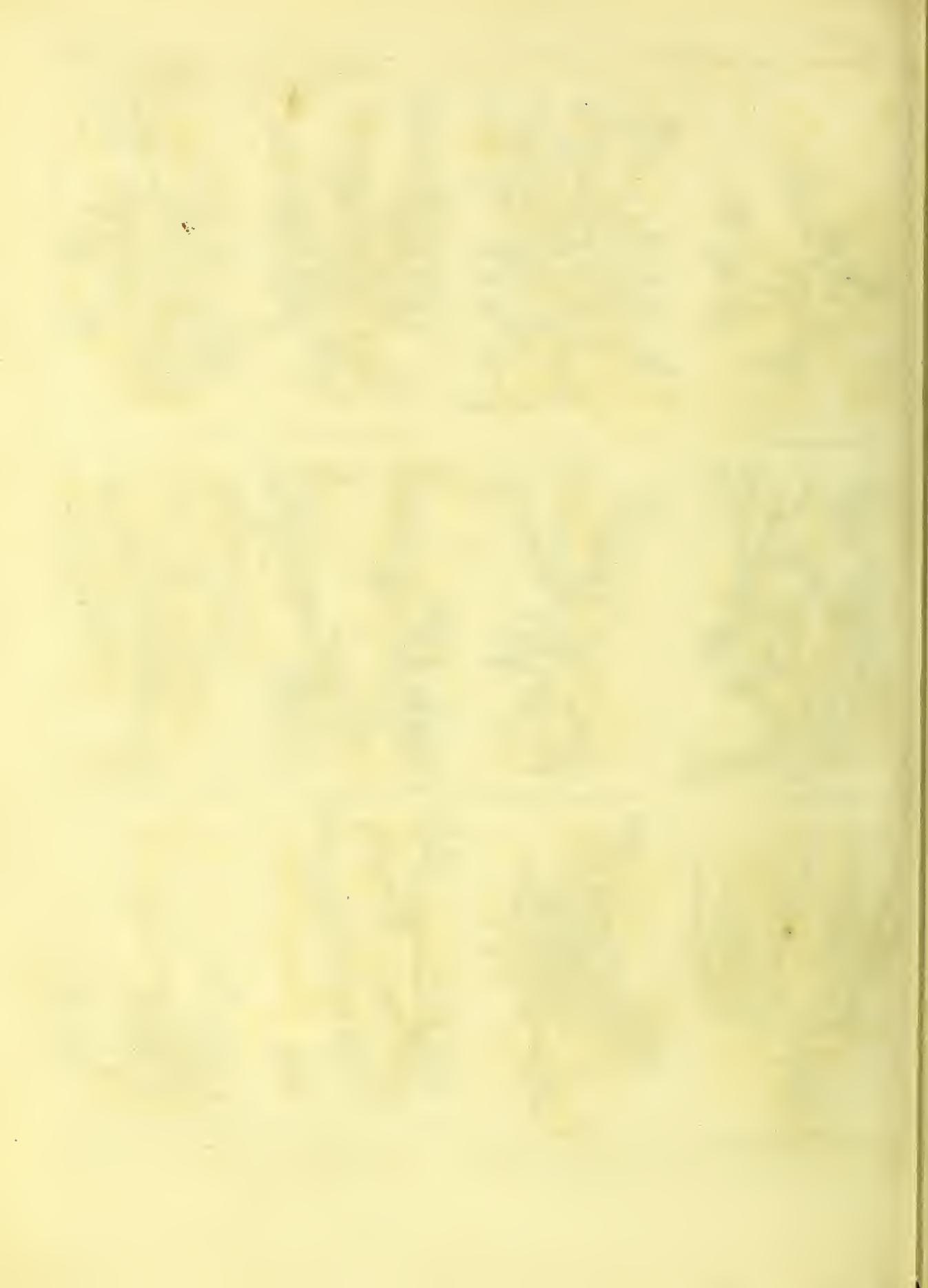
Rupture wort.



*The Pithy Rush.**Common Rushes.**Rye.**Rice.**Aromatic Reed.**Saffron.**Bastard Saffron.**Small Sage.**Broad Sage.**Wood Sage.**Great Solomons Seal.**Small Solomons Seal.*









Burnet Sarsaparilla.



Great Scabious.



Sheep's Scabious.



Third Scabious.



Scurvy Grass.



First Self-heal.



Second Self-heal.



Service Tree.



Shepherd's purse.



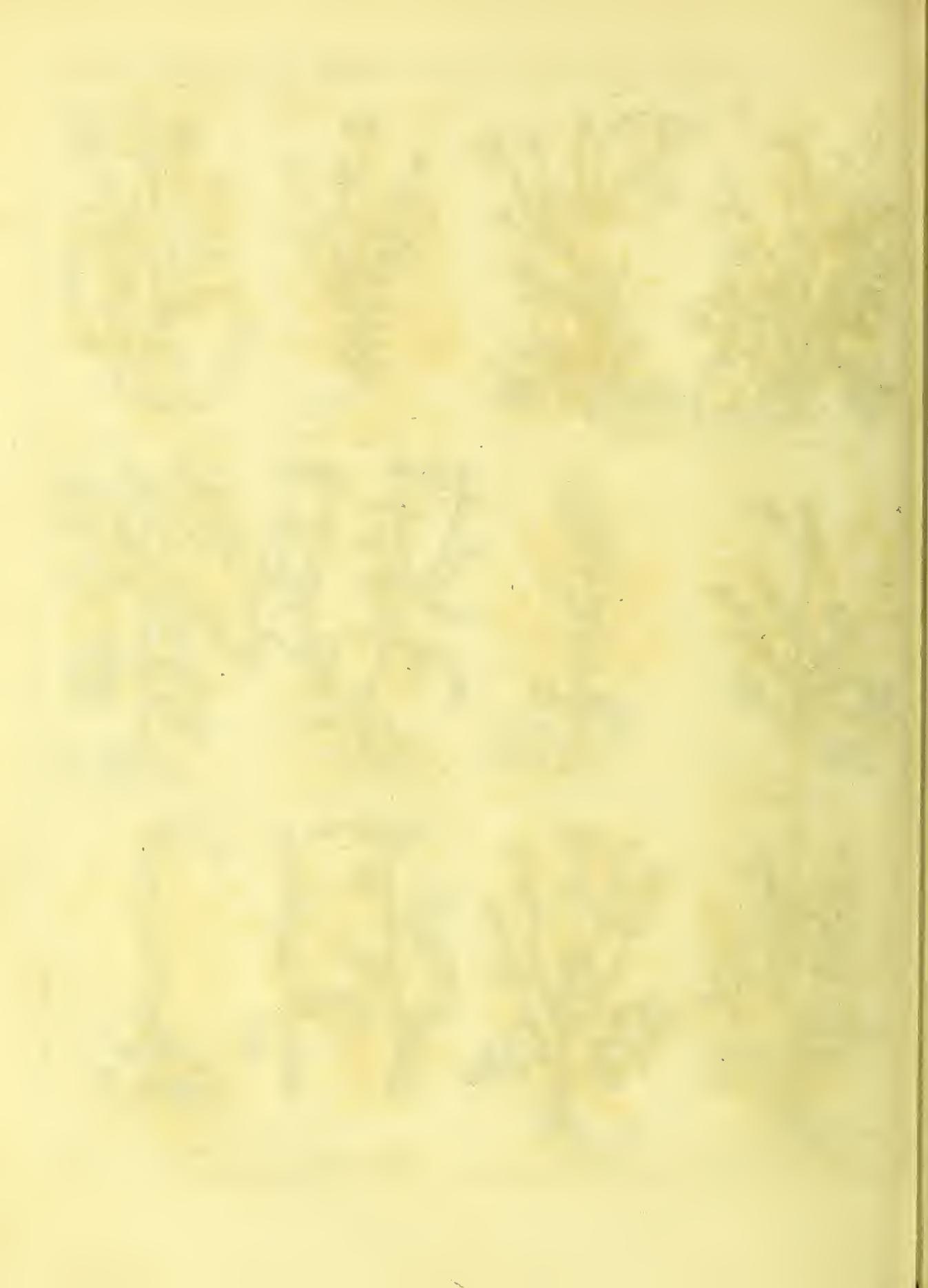
Smallage.



Soapwort.



Sorrel.









Yellow Succory.



Garden Succory.



Great Stonecrop.



Wall Stonecrop.



Yellow Stone crop.



Sarsaparilla.



Sanders.



Scammony.



Sebestan.



Wild Sebestan.



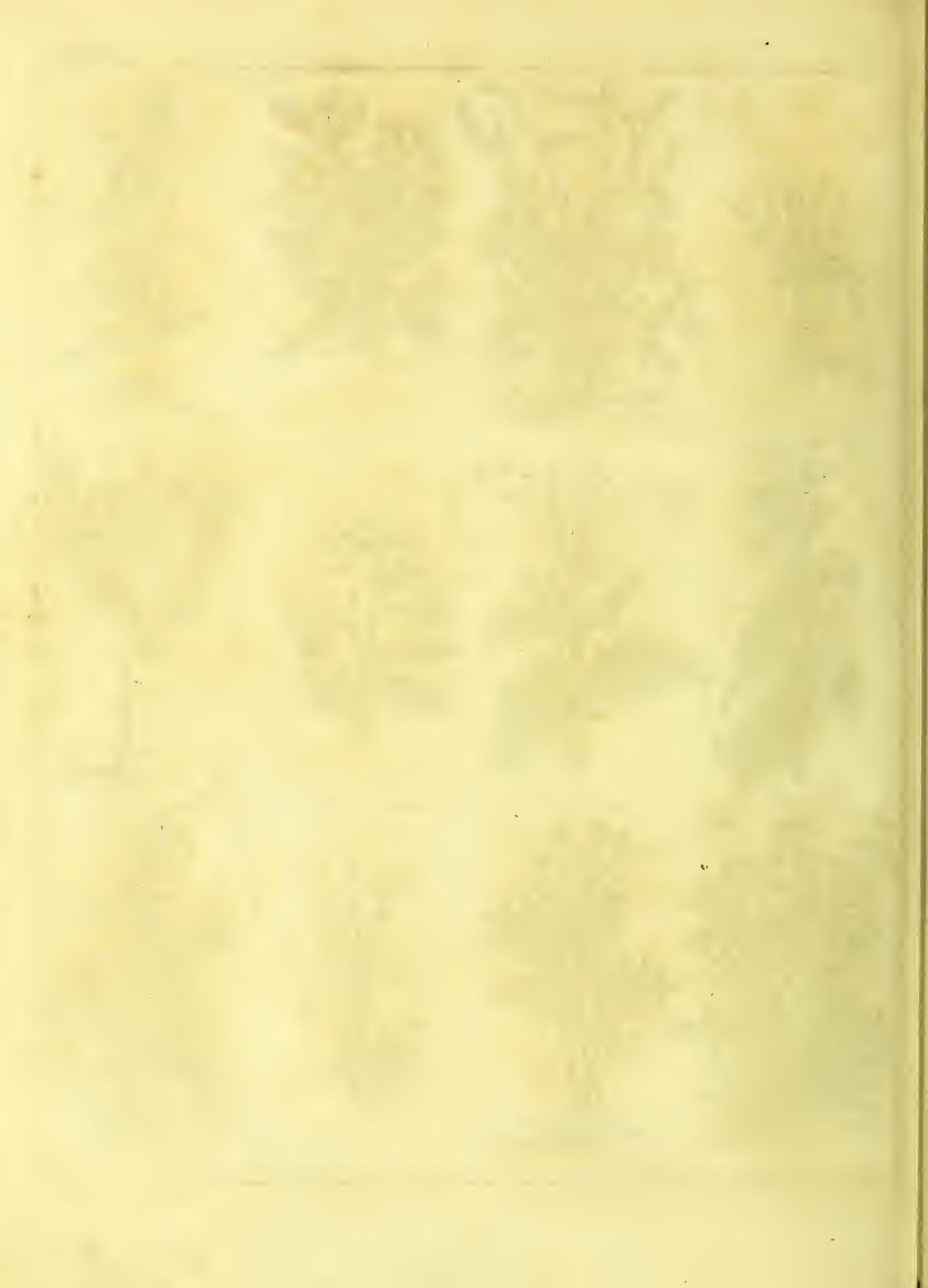
Sena.



Sycamore Tree.









Woolly or Cotton Thistle.



Globe Thistle.



Fuller's Thistle.



Wild Thistle.



Treacle Mustard.



Mithridate Mustard.



Black Thorn.



Thorough Wax.



Common Thyme.



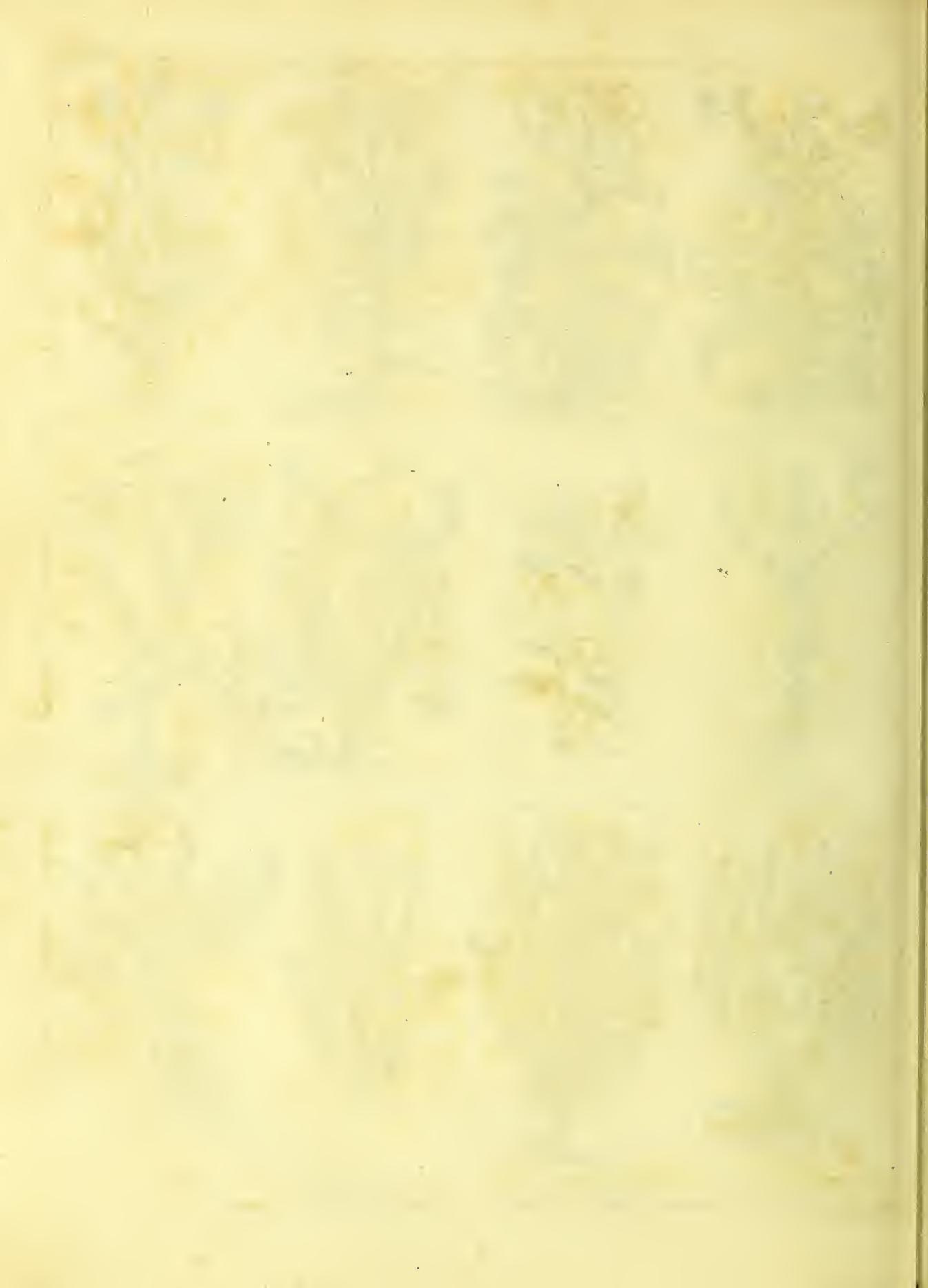
Thyme of Candia.



Mother Thyme.



Wild Thyme.





Tormentil.



Great Turnsole.



Small Turnsole.

Meadow Trefoil.



Heart Trefoil.



Pearl Trefoil



Sweet Trefoil



Wild Trefoil.



Stone Trefoil.



Tutsan or Porkleaves



Garden Valerian



Great Wild Valerian.





Small Wild Valerian.



Greenish Valerian.



Upright Vervain.



Flat Vervain.



Low Vervain.



Vine.



Purple Violets.



Yellow Violets



Strange Violets



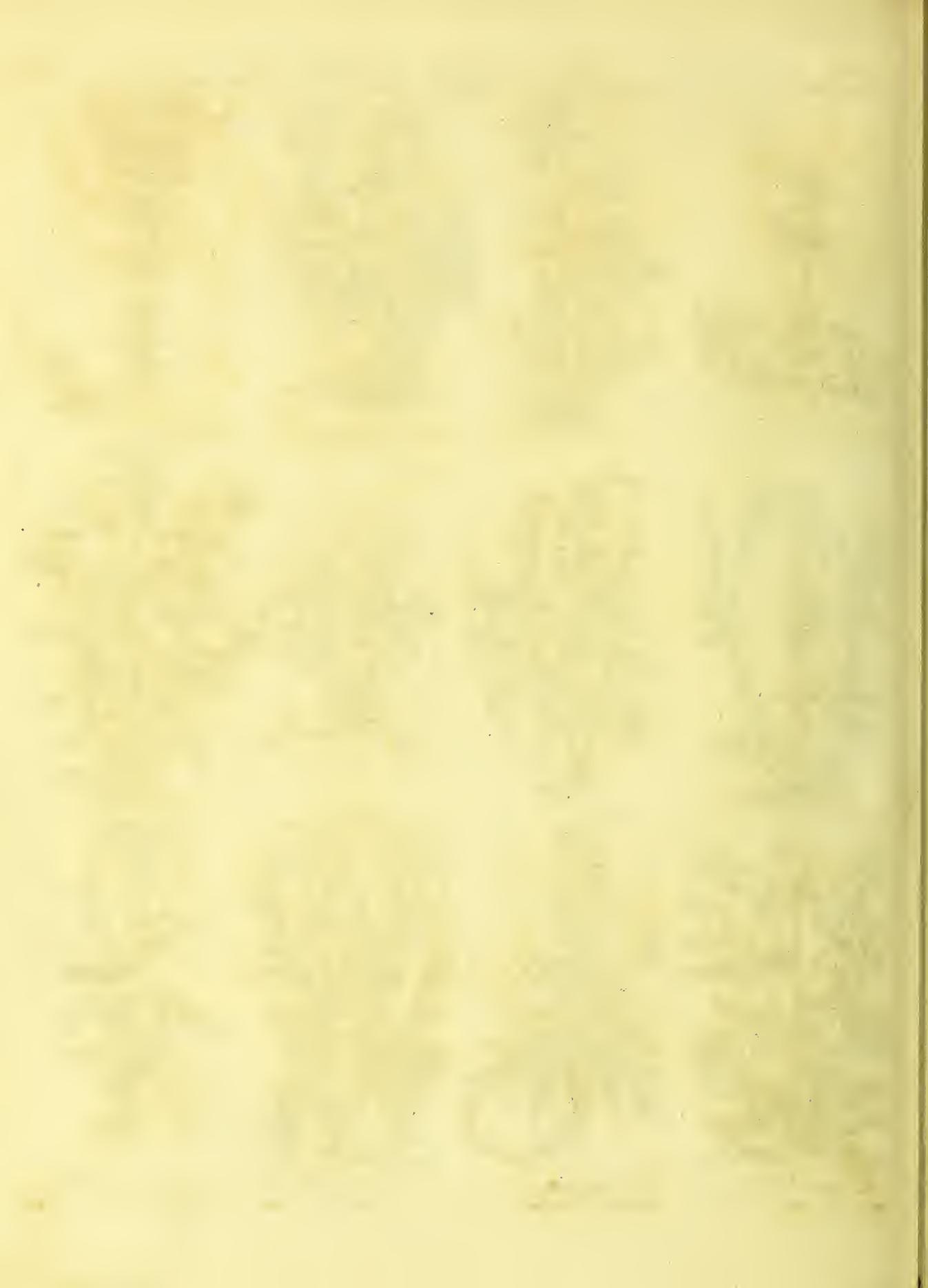
Vipers Bugloss.



Garden Bugloss.



Wild Bugloss.





Wall Flower.



Winter Gilly Flower.



Stock Gilly Flower.



Walnut Tree.



Wold, or Dyersweed. Common Wheat.



Spelt Wheat.



Tiph Wheat.



Roman Wheat.



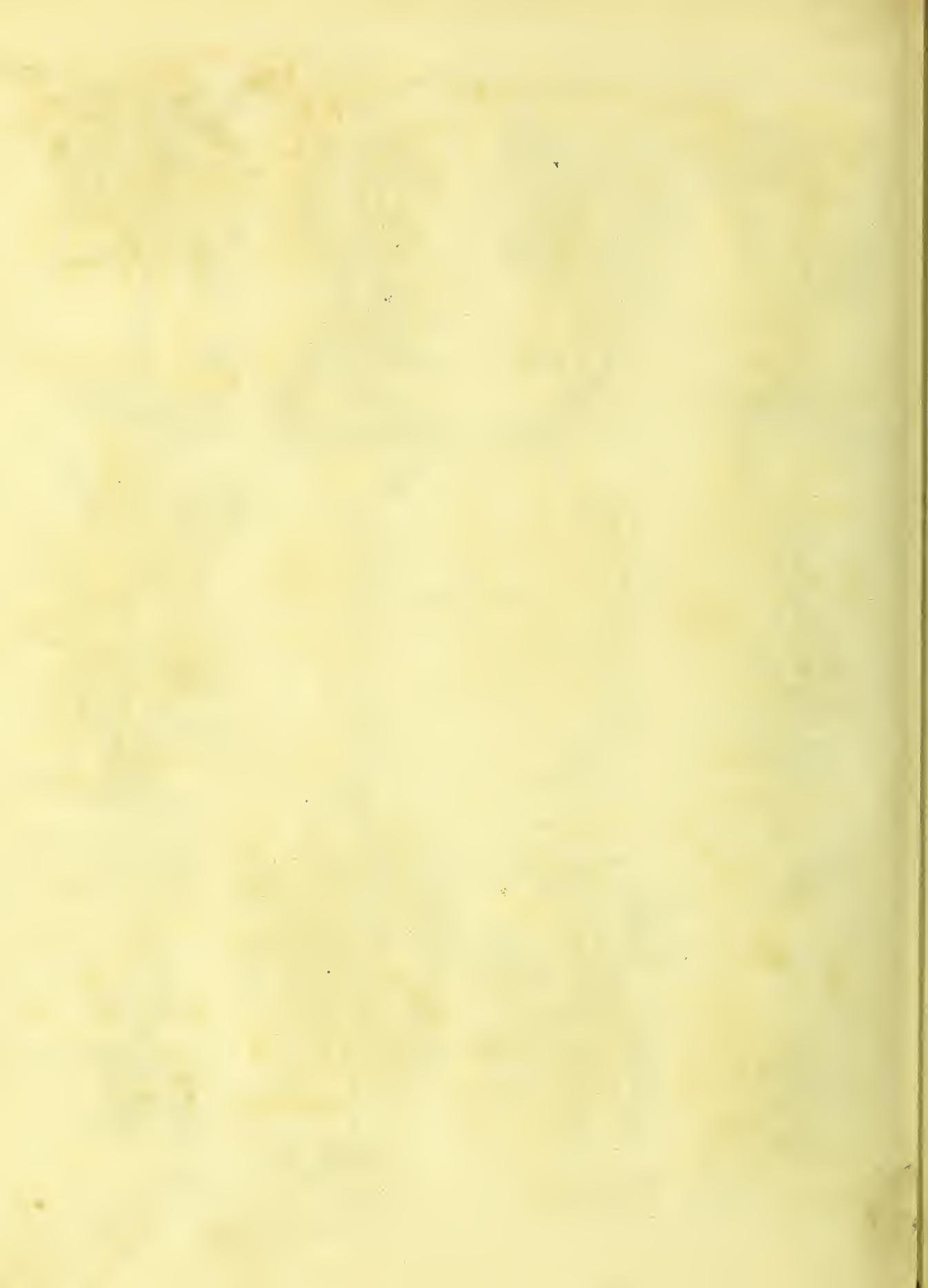
White Willow.



Common Willow.



Wood.





Garden Wood.



Wild Wood.



Honeysuckle.



Woodbine.



Common Wormwood.



Sea Wormwood.



Roman Wormwood.



Great Blue Wolfbane.



Small Blue Wolfbane.



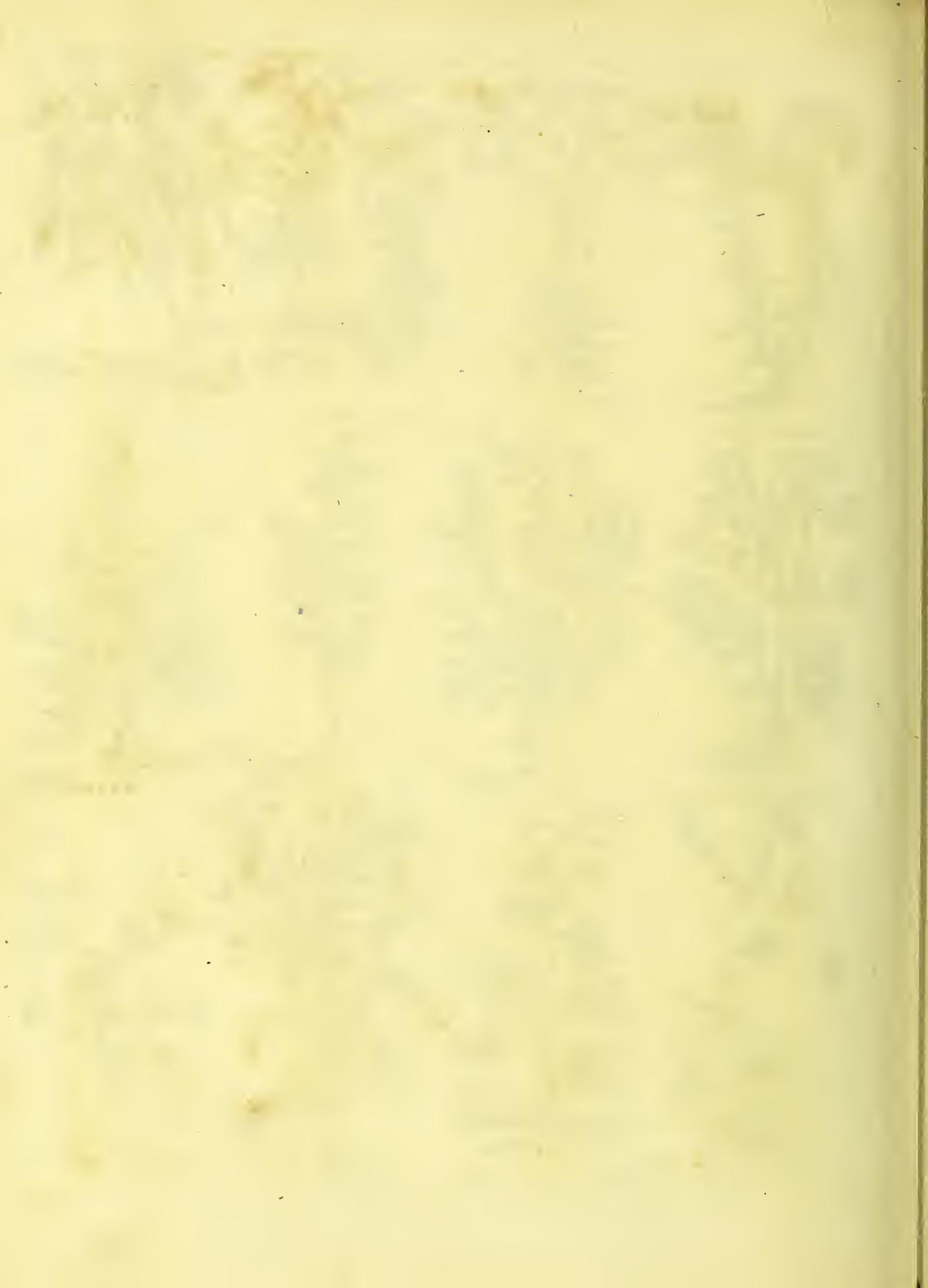
Yellow Wolfbane.



Yarrow.



Yucca.



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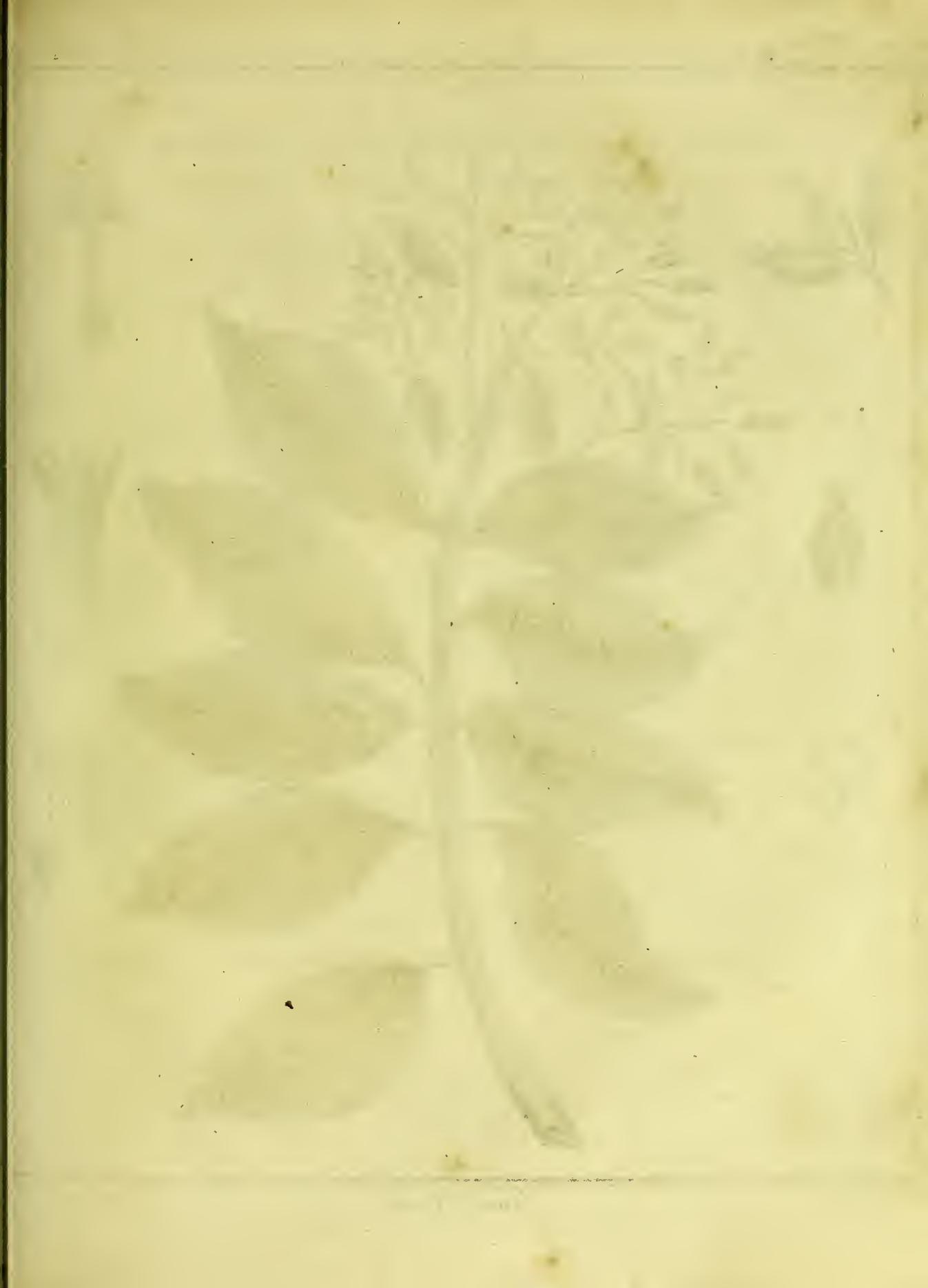
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END OF THE HERBAL.





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## APPENDIX

TO

### CULPEPER's BRITISH HERBAL.

---

**H**AVING given a minute description of the plants and herbs contained in Culpeper's British Herbal, with their medical properties and effects, I shall proceed to an investigation of some foreign trees, plants, and herbs, that are now in general use amongst us. And first, of the

#### PERUVIAN OR JESUITS' BARK. CINCHONA.

CORTEX PERUVIANUS, called also *quinquina*, *kinkinna*, *quina-quina*, *pulvis patrum*, and popularly the *Jesuits' bark*, is the bark of a tree, growing in the West-Indies, called by the Spaniards *palo de calenturas*, q. d. fever-wood; by reason of its extraordinary virtue in removing all kinds of intermitting fevers and agues. The Indians commonly call it the *fuddling-tree*, from the property it has of intoxicating fishes, when either its wood or bark is beaten, and steeped in the water where they are. The tree that yields this noble specific, is only found in Peru, in the province of San Francesco de Quito, or Quinto, near the city of Loxa; though some say it is also found in that of Potosi; and F. Labat in the island of Guadaloupe. The bark, while on the tree, is streaked, of a whitish yellow without-side, and a pale tan-colour within.

The Spaniards distinguish four sorts of this precious bark, viz. the *cascarilla colorada*, or reddish bark; *amarylla*, or yellowish; *crespilla*, or curling; and *blanca*, or whitish. The *colorada* and *amarylla* are reckoned the best; the *crespilla* is the pro-

duce of the same sort of tree, only growing in a colder climate, which impairs the quality of the bark, and renders it whitish on the outside, and cinnamon-coloured within, and unfit for medicinal use. As to the *blanca*, as it is procured from another species of the tree of a much larger trunk, the leaves of a lighter green colour, and the bark of a very thick spongy substance, whitish on the outside; being so tough, as to require the force of an axe to slice it from the tree. When first cut down it is as bitter as the best sort, and has then the same virtue in the cure of intermitting fevers; but when dry, and kept any length of time, it grows insipid, and good for nothing. In reality, both sorts are found to have much surer and quicker effects when green than when dry, so that the Europeans only come in for the second-rate virtues: what is worse, the bad sort is in great plenty, and the good is very scarce, and hard to come at: for which reason, with a little of the fine bark sent yearly to Panama, for Europe, large quantities of the worst sort are usually mixed.

The *amarylla*, or small bark, which curls up like sticks of cinnamon, and which in England is much esteemed, as being supposed to be taken from the branches of the tree, and therefore more efficacious in the cure of fevers, is only the bark of the younger trees; which, being very thin, curls in this manner. For the bark of the branches is never gathered; it would not compensate the charge of cutting. The season of cutting the bark is in August, the only settled dry time in the country. After a tree has been barked, it requires eighteen or twenty years for a good bark to grow again. Mr. Arrot, a Scotch surgeon, who had gathered the bark in the place where it grows, is of opinion, that the gathering the better sort of bark will soon be at end, or at least very much reduced, partly by reason of its distance from any inhabited place, and the impenetrability of the woods where it grows, and partly by the want of Indians to cut it, whose race, through the cruelties of the Spaniards, is likely to be totally extinct.

The most accurate account we have ever received of the tree which produces the *quinquina*, or true Peruvian bark, is from M. de la Condamine, who, in travelling through some parts of America, chose the route of Loxa, where the finest bark is gathered, and where the greatest number of the trees is found; and, taking instructions from M. de Jussieu, informed himself concerning it. The *quinquina-tree* never grows in the plains; it is a constant inhabitant of the mountains, and is easily known from the trees among which it stands by its erect growth, and its height when of any considerable age, as it always carries its head above the rest, and also by its size. The trees are never found in clumps or clusters together, but always separate or single among other kinds. It is very rare, however, to find any large ones at this time on the mountain where the bark is gathered, the great demand for it having made

made them bark all the trees, and these having all perished by it ; for the old trees never recover the barking, though the young ones frequently do.—The bark is now gathered at all times, if the weather be dry. When the bark is taken off, it is laid in the sun till it is perfectly dry : the omitting this circumstance, and packing up the bark while moist, have occasioned it often to become mouldy, and spoil ; and the merchants have attributed this to the taking it off in the wrong time of the moon, when it was wholly owing to its being put into the skin while too moist.

The leaves of the quinquina-tree stand on pedicles of about half an inch long : they are very smooth and glossy, and of a beautiful green ; but somewhat paler on the under side than the upper. They are perfectly smooth at the edges, and are of an oblong figure, pointed at the end, and rounded at that part which joins to the stalk. They are from two and a half to three inches in length, and from an inch and a half to two inches in breadth. The middle rib of the leaf is rounded on the upper side, and is usually of a reddish colour, especially towards the pedicle ; and the whole leaf often becomes red, when perfectly mature. All the small branches towards the top of the tree terminate in one or more clusters of flowers, which, before they are open, resemble in shape and colour those of the common lavender. When these open, they change their colour : each stalk that sustains one of these clusters arises from the ala of one of the leaves, and divides into many small branches, each terminated by a cup divided into five parts, which sustains a flower resembling that of the hyacinth. It is composed of a pipe of three quarters of an inch long, which at the end is divided into five, and sometimes into six, segments. These are of a beautiful deep red within, and are serrated round the edges in a very elegant manner. From the bottom of the tube of the flower there arises a white pistil, terminated by a long green head ; this rises above the level of the segments of the flower, and is surrounded by five stamina, which sustain apices of a pale yellow colour : these remain hid within the flowers. The tube is of a dirty red, and is covered with a sort of whitish down. When the flower is fallen, the cup swells in the middle into the form of an olive, which by degrees grows into a fruit divided into two cells, which in drying becomes shorter, and the whole fruit rounder than its natural condition.

This fruit finally opens longitudinally into two capsules, separated by a membranaceous septum, and coated by a thin yellowish skin ; the seeds are of a reddish colour, and in shape are flattish, and, as it were, foliaceous ; they are not more than the twentieth part of an inch in diameter, and are thickest in the middle, becoming thinner at each side. The plantula *feminalis* lies in the very centre of the seed, between two pellicles : these seeds are fastened in the manner of so many scales to a placenta of an oblong figure, pointed at the two extremities, so as somewhat to resemble

femble a seed of the common oat, but that it is longer and flatter. This is joined to the septum, and has on that part a longitudinal furrow; but on the other side is convex, and somewhat rough all over. Mem. Acad. Scienc. Par. 1738. By this description it appears, that they were very ignorant of the nature and characters of this tree, who, when it was first introduced among us, called it a species of sebesten.

The use of this febrifuge seems to have been very long known to the natives, probably as early as 1500; and their manner of taking it was by pounding the bark, laying it to infuse in water, and drinking the infusion; their hatred to the Spaniards, their conquerors, made them keep it a long time secret from them; and, when the thing became known among the inhabitants of Loxa, it still remained a secret to the rest of the world, and its great value was never generally known till the year 1653; when the lady of the viceroy of Peru, the Countess de Chinchon, being long ill of an intermitting fever, which would give way to none of the known remedies, the corregidor of Loxa sent to the viceroy a quantity of the quinquina bark, which he assured him would cure the lady, though all other means had failed. Upon this the corregidor was sent for to Lima, and, after having given the medicine to many other persons with safety and success, the lady at length took it, and was cured. She immediately on this sent for a large quantity of the bark, had it powdered, and herself dispersed it to those who had occasion for it; whence it obtained the name of the *Countess's powder*: but this lady, being soon tired of the office, gave it in charge to the Jesuits; and, they continuing to give it to the sick with the same success, it then was called the *Jesuit's powder*. These reverend fathers soon found means to send a quantity of it to Cardinal Lugo, who dispersed it with the same success at Rome; and after him the apothecary to the college gave it gratis to the poor with the same good effects, under the name of the *Jesuit's*, or the *Cardinal's*, powder. Afterwards the better sort were made to pay its weight in silver for it, to defray the expenses of its importation, while the poor still had it gratis. Louis XIV. at that time dauphin of France, was cured by it of a fever, which had not given way to other medicines. When the Count and Countess of Chinchon returned to Spain, their physician, Jaun de Vaga, who brought a great quantity of it over with him, sold it at a considerable price; and, soon after this, large quantities were sent over by the galleons: but, the great demands from Europe causing the inhabitants of Loxa to adulterate it with other barks, it had like to have lost part of its just praise. The quinquina-trees are found at this time on all the chain of mountains adjoining to Cajanuma, and in many other parts of America.

When bark was first introduced, it is said to have been sold for about eight shillings sterling the dose; which great price, with the little effects found from it, by reason

reason of their ignorance of the manner of preparing and prescribing it, occasioned its being disused, till about the year 1679, when Mr. Talbot, an English practitioner in physic, brought it into vogue again, by the great number of cures wrought about the court and city of Paris with this powder, prepared after his manner ; the secret whereof was soon after made public by the munificence of Louis XIV. who rewarded Talbot for the discovery with 5000 crowns. The preparation is about two ounces of the cortex in powder, digested in a sand-heat, with about a quart of red wine : after digestion, the wine must be poured off, and two or three ounces given every three or four hours between the paroxysms, till the intention is answered.

The quinqua is sold either in bark or in powder : those who buy it in the bark must choose it very dry and compact ; such as has never been moistened, and which will break close and smooth, is friable between the teeth, is easily pulverized, and yields a powder of a pale cinnamon-colour. It has a musty kind of smell, and yet so much of the aromatic as not to be disagreeable. The inferior kinds, when broken, appear woody, and on chewing separate into fibres. The female bark is considerably thicker, whiter on the outside, redder within, and weaker in smell and taste, than the former, and much inferior in medicinal virtue. The small fine quilled barks, shagreened without and reddish within, of a bitter musty taste, are the most esteemed. The powder must be well sifted, and care be taken to buy it of persons that may be trusted ; it being very easy to sophisticate it, and difficult to find out the fraud. The red bark, lately brought into reputation by the experiments of the ingenious Dr. Saunders, possesses the virtues of the common bark in a much higher degree. A quantity of it was introduced to London, as part of the cargo of a Spanish ship from Lima, taken by an English frigate in 1779, and carried into Lisbon. Whether this is the bark of the trunk of full-grown trees, the branches, or young trees yielding the pale bark, or whether the trees be of different species, is not yet accurately determined. In the province of Santa-Fe, there have been lately discovered two kinds of cinchona ; one of which is the red bark of Peru ; and the other, one of the white species.

The cortex is a bitter, absorbent, and astringent, or styptic : from its bitterness, M. Reneaume observes it becomes fit to soften sour acrimonious juices ; for a sour and a bitter make a sweet. Again, as an absorbent, it blunts the points of acids, and prevents their action ; and, of consequence, preserves the fluidity of the juices, which acids would coagulate. As a styptic, it must have earthy parts to absorb serosity, by which the parts, before moistened and relaxed, will contract themselves ; and, by this means, the cortex augments the spring and tension of the fibres. As a bitter, it warms ; and it facilitates perspiration by warming and augmenting

the fluidity of the juices. Its primary operation is that of strengthening the solids. On these properties it is that its medical use sare founded. Its chief operation is in curing of agues, and intermitting fevers ; for which purpose it is applied in all ages and most constitutions. It produces this effect better than any other medicine of the same intention, in the ratio of 365 to 1. It is usual to give a gentle emetic of ipecacuanha before the exhibition of the cortex : by thus preparing the passages, the cortex has not only more succes, but also is not subject to cause those indispositions, viz. swelling in the belly, nauzeas, &c. which often arise when such preparation is neglected. The cortex must never be exhibited in the paroxysm of an ague, or intermitting fever ; but given in such a quantity, at times, between the paroxysms, as to prevent a return of the fit. The cortex exhibited in continual fevers, is held dangerous ; and care must be taken, that the remission of a continual fever be not mistaken for its intermission, which happens at particular or stated times. The cortex is given several ways, viz. in powder, in form of electuary, extract, bolus, infusion, tincture, &c. When the stomach will bear it, the preparation in very fine powder is the most useful and agreeable.

If the bark take downward, Venice treacle, diaſcordium, conſerve of roses, terra Japonica, doſes of laudanum, &c. muſt be added to its preparations. When there happens to be an obſtruction of the menſes from the exhibition of the cortex, or to prevent it, it is advifeable to add to its preparations black hellebore, æthiops mineral, cinnabar, &c. The cortex is often used for young children in agues, by way of clyſter ; and alſo applied to the wrists, and foles of the feet, wrought up in a ſtiff maſs, with turpentine, Venice treacle, &c. which uſually anſwers the purpoſe. John Helvetius, physician to the King of France, above ſixty years ago, wrote a book entirely upon the ſubject of curing agues by giving the cortex clyſter-wife ; in which he pretends, that this is a more ſafe, and no leſs certain, than when it is given by the mouth. Dr. Cockburn, in his Treatife of Sea Difeaſes, afferts the contrary : he alleges, that the cortex given inwardly is as ſafe, and much more certain and expeditious ; and notes, that we know how to remedy all the inconveniences the cortex may occaſion. Dr. Sydenham, and after him Mr. Reneaume and others, have preſcribed the cortex, with ſucces, in melancholic and hysteric affections, commonly called vapours.

The virtues of this medicine are at this time ſufficiently known ; but the largenes of its doſe in the common forms of powder, or infusion in wine or in water, are great diſadvantages ; and our common methods of giving it in the extract or resin, as we prepare them, not certain, nor without inconveniencē. Mr. Geoffroy has attempted a method of giving the bark in all its efficacy, without its ill taste, and in

one third of the usual dose, by means of its dry extract; twenty-four grains of which, it is asserted, contain the whole efficacy of a dram of the choicest bark in powder. Hence it appears very evident, that when we take the bark in substance, it is only about a third part of what we are forced to swallow that can be of any use to us; and that the same portion is all we can expect in the virtues of any decoction or infusion of it. *Mem. Acad. Sci. Par.* 1758.

Wine, which is a liquor partly aqueous, partly saline, and partly spirituous, is a menstruum much properer to extract the virtues of the bark than mere water, as it is much more able to dissolve the juices or sap condensed and inspissated in the bark of the tree; and for this reason a strong infusion of bark in this menstruum remains clear, and keeps the resin suspended when cold; in which respect it differs from the infusion in boiling water when cooled, as the resin precipitates itself. Thus it is the fire alone which can suspend the resin in a watery infusion of the bark; and in a vinous one, the spirituous and inflammable part of the liquor does the same thing: and as the resin of the bark, which there is great reason to believe possesses all the virtues of that medicine, is wholly precipitated from watery infusions when cold, it has been said there can be but very little dependence placed on the common clear infusions in this menstruum: the remaining taste in these infusions is only a faint bitterness, which arises from the gummoſe and saline parts of the dried juices of the bark: the whole concrete, which alone possesses the virtue of the medicine, being of the nature of those bodies properly called *gum resins*, which are but very imperfectly soluble in water, and of which wine is the proper dissolvent. It has been found, that cold water, acting more gradually than boiling water, extracts both the gummy and resinous principles of bark. And infusions made by macerating one ounce of bark in fine powder, in eight or twelve of water, without heat, for twenty-four (or even twelve) hours, have been successfully administered in doses (of the clear liquor) of two or three ounces. It is a common opinion, that bark in substance is more effectual than any preparation of it. *Lewis, Mat. Med.*

Peruvian bark has been found very effectual in preventing colds. The method in which it was used, in a case mentioned in the Philosophical Transactions, was, after due preparation by bleeding or purging, to take two ounces of it every spring and fall. By this method, an habitual taking of cold, and a consequent sore throat, was cured. *Phil. Trans.* No. 478. p. 3.

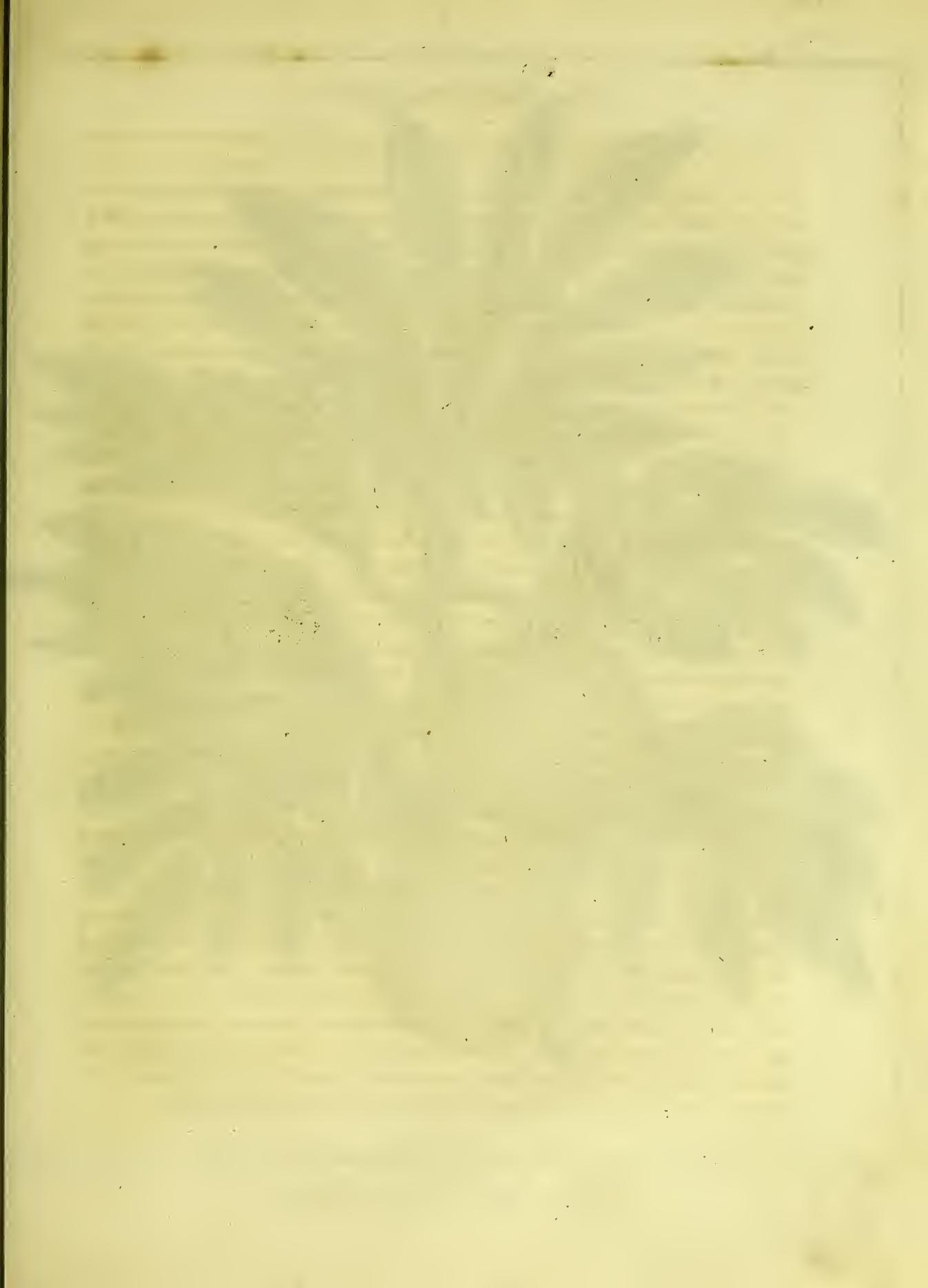
The antiseptic power of the bark has been abundantly evinced, and we have many accounts of its great effects in the cure of gangrenes and mortifications. See *Med. Eff. Edinb.* vol. iii. art. 5. We have also several accounts of the good effects of this medicine in ulcers and the small-pox, and also in scrophulous complaints.

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The bark probably in cases of this kind throws off by fermentation a quantity of subtile vapour, or fixed air, which is sufficient to saturate the acrimonious matter ; and, even when the putrefaction has made farther advances, larger quantities of this medicine will discharge more of the antiseptic vapour, which, reaching the blood, will restore its consistence, and correct its sharpness. Macbride's Essays, edit. 3. p. 140, &c. The bark has also been applied, in conjunction with other medicines, to the cure of periodical head-achs, hysterical, hypochondriacal, vertiginous, and epileptic, complaints. And it is a very useful medicine in weakness of the stomach, uterine fluxes, and sundry chronical diseases proceeding from a laxity and debility of the fibres.

Many instances are recorded by medical writers of the jaundice, dropsy, asthma, and all the train of nervous disorders, brought on in a surprising short time after an injudicious administration of the bark : among others, the curious may consult the Med. Eff. Edinb. vol. iv. art. 24. The Peruvian bark is discovered to be effectual in the cure of mortifications from an internal cause. The history of this discovery is : In 1715, Mr. Rushworth, surgeon in Northampton, gave it to a patient labouring under a mortification ; and, having afterwards other proofs of its good effects in this disease, communicated his discovery in 1731. Mr. Amyand soon tried it in such cases, and found it successful in seven. Mr. John Douglas confirmed this by the history of a patient of his, which he published in 1732 ; and Mr. Shipton soon after related his success by this medicine to the Royal Society. Mr. Rushworth and Mr. Amyand confirmed its use in mortifications from an internal cause ; the former thinks it is not proper in all cases of that kind, particularly where there is no intermission in the fever. Mr. Douglas seems to think it will succeed in all mortifications. All these three gentlemen gave half a dram for a dose every fourth hour. Mr. Shipton increased the dose of two scruples, and gave it while the fever continued. He proposed to have it tried in nomæ, phagedenæ, herpes, or other chironion ulcers.

Some call the gentian-root the European quinquina, because good against intermitting fevers. The sea-side beech of Jamaica, or *Cinchona Carribæa* of Linnæus, is a species of the Jesuits' bark, produced in Jamaica and the Carribee islands, which, together with its virtues, has been accurately described by Dr. Wright, who found it very efficacious in the dangerous remittent fevers of the West Indies ; and it has been lately administered in London in intermittents, in which it has effected a cure as completely as the Peruvian bark. *Phil. Trans.* vol. lxvii. 504. *Med. Com.* vol. v. p. 398. part 2.





BREAD-FRUIT TREE. *ARTOCARPUS.*

THIS tree is called *artocarpus*, (from *ἄρτος*, bread, and *φροτός*, fruit;) and is a genus of the monandria order, belonging to the monœcia class, of plants. It has a cylindric amentum or catkin, which thickens gradually, and is covered with flowers; the male and female in a different amentum. In the male, the calyx is two-valved, and the corolla is wanting. In the female, there is no calyx nor corolla; the stylus is one, and the drupa is many-celled.

Though this tree has been mentioned by many voyagers, particularly by Dampier, by Rumphius, and by Lord Anson, yet very little notice seems to have been taken of it till the return of Captain Wallis from the South Seas, and since that time by others who have touched at Otaheite, and some other countries in the East-Indies. Captain Dampier relates, that in Guam, one of the Ladrone islands, "there is a certain fruit called the bread-fruit, growing on a tree as big as our large apple-trees, with dark leaves. The fruit is round, and grows on the boughs like apples, of the bigness of a good penny loaf; when ripe, it turns yellow, soft, and sweet: but the natives take it green, and bake it in an oven till the rind is black: this they scrape off, and eat the inside, which is soft and white, like the inside of new-baked bread, having neither seed nor stone; but, if it is kept above twenty-four hours, it is harsh. As this fruit is in season eight months in the year, the natives feed upon no other sort of bread during that time. They told us that all the Ladrone islands had plenty of it. I never heard of it in any other place."

Rumphius, after describing the tree, observes, that "the fruit is shaped like a heart, and increases to the size of a child's head. Its surface or rind is thick, green, and covered every-where with warts of a quadagonal or hexagonal figure, like cut diamonds, but without points. The more flat and smooth these warts are, the fewer seeds are contained in the fruit, and the greater is the quantity of pith, and that of a more glutinous nature. The internal part of the rind, or peel, consists of a fleshy substance, full of twisted fibres, which have the appearance of fine wool; these adhere to, and in some measure form, it. The fleshy part of this fruit becomes softer towards the middle, where there is a small cavity formed without any nuts or seeds, except in one species, which has but a small number; and this sort is not good, unless it is baked or prepared some other way; but, if the outward rind be taken off, and the fibrous flesh dried, and afterwards boiled with meat, as we do cabbage, it has then the taste of artichoke-bottoms. The inhabitants of Amboyna dress it in the liquor of cocoa-nuts; but they prefer it roasted on coals till the outward part or peel is burnt. They afterwards cut it into pieces, and eat it with the milk of the cocoa-nut."

Some people make fritters of it, or fry it in oil ; and others, as the Sumatrians, dry the internal soft part, and keep it to use instead of bread with other food. It affords a great deal of nourishment, and is very satisfying ; therefore proper for hard-working people ; and, being of a gentle astringent quality, is good for persons of a laxative habit of body.

“ It is more nourishing boiled in our manner, with fat meat, than roasted on coals. The milky juice which distils from the trunk, boiled with the cocoa-nut oil, makes a very strong bird-lime. This tree is to be found on the eastern parts of Sumatra, and in the Malay language is called *foccus* and *foccum capas*. It grows likewise about the town of Bantam, in Java, and in Ballega and Madura ; and is known there by the name of *foccum*.”

In Anfon’s voyage we are informed, “ that the *rima*, or bread-fruit tree, is common in all the Ladrone islands, and some of the Philippines. It is somewhat larger than our apple-tree, and bears a broad dark-coloured leaf with five indentures on each side. The fruit hangs on boughs like apples, and is of the size of a penny loaf, with a thick tough rind, which when full ripe turns yellow. The natives gather it before it is quite ripe, and bake it till the crust is pretty black ; then they rasp it, and there remains a pretty loaf, with a tender yellow crust, and the crumb of it is soft and sweet as a new-baked roll : it is without any seeds or stones. This fruit the inhabitants enjoy for about seven months ; during which they never eat any other kind of bread : but they are obliged to bake it every day ; for, when it grows a little stale, it becomes harsh and husky, somewhat like the potatoe-bread made in the west of England. There is, however, a remedy for this ; which is cutting the loaf into slices when it is new, and drying it in the sun, by which it is changed into the pleasanteſt rusk that can be eaten.”

Captain Cook, in his voyage, observes, that this fruit not only serves as a substitute for bread among the inhabitants of Otaheite and the neighbouring islands, but also, variously dressed, composes the principal part of their food. It grows on a tree that is about the size of a middling oak ; its leaves are frequently a foot and a half long, of an oblong shape, deeply sinuated like those of the fig-tree, which they resemble in colour and consistence, and in the exuding of a milky juice upon being broken. The fruit is about the size and shape of a new-born child’s head ; and the surface is reticulated, not much unlike a truffle ; it is covered with a thin skin, and has a core about as big as the handle of a small knife. The eatable part lies between the skin and the core ; it is as white as snow, and somewhat of the consistence of new bread ; it must be roasted before it is eaten, being first divided into three or four parts ; its taste is infipid, with a slight sweetneſs ſomewhat reſembling that of the

crumb

crumb of wheaten bread mixed with a Jerusalem artichoke. This fruit is also cooked in a kind of oven, which renders it soft, and something like a boiled potatoe; not quite so farinaceous as a good one, but more so than those of the middling sort. Of the bread-fruit they also make three dishes, by putting either water or the milk of the cocoa-nut to it, then beating it to a paste with a stone pestle, and afterwards mixing it with ripe plantains, bananas, or the four paste which they call mahie.

The *mahie*, which is likewise made to serve as succedaneum for ripe bread-fruit before the season comes on, is thus made: The fruit of the bread tree is gathered just before it is perfectly ripe; and, being laid in heaps, is closely covered with leaves: in this state it undergoes a fermentation, and becomes disagreeably sweet: the core is then taken out entire, which is done by gently pulling out the stalk, and the rest of the fruit is thrown into a hole which is dug for that purpose generally in the houses, and neatly lined in the bottom and sides with grafts: the whole is then covered with leaves, and heavy stones laid upon them; in this state it undergoes a second fermentation, and becomes sour, after which it will suffer no change for many months. It is taken out of the hole as it is wanted for use; and, being made into balls, it is wrapped up into leaves and baked: after it is dressed, it will keep five or six weeks. It is eaten both cold and hot; and the natives seldom make a meal without it, though to Europeans the taste is as disagreeable as that of a pickled olive generally is the first time it is eaten. The fruit itself is in season eight months in the year; and the mahie supplies the inhabitants during the other four.

To procure this principal article of their food (the bread-fruit) costs these happy people no trouble or labour except climbing up a tree. The tree which produces it does not indeed grow spontaneously; but, if a man plants ten of them in his lifetime, which he may do in about an hour, he will as completely fulfil his duty to his own and future generations as the native of our less temperate climate can do by ploughing in the cold of winter, and reaping in the summer's heat, as often as these seasons return; even, if, after he has procured bread for his present household, he should convert a surplus into money, and lay it up for his children.

There are two species of *artocarpus*, viz. the *incisus*, with gashed leaves; and the *integrifolia*, with entire leaves. There is also said to be another distinction, into that which bears fruit with stones or seeds, and that in which the fruit has none. The parts of fructification of that tree which bears the fruit without stones are defective. The amentum, or catkin, which contains the male parts, never expands. The styli, or female part of the fruit, are likewise deficient. From which it follows that there can be no stones or seeds, and therefore that this tree can be propagated only by suckers or layers; although it is abundantly evident that it must originally

have

have proceeded from the seed-bearing bread-fruit tree. Instances of this kind we sometimes find in European fruits; such as the barberry, and the Corinthian grape from Zant, commonly called currants, which can therefore be increased only by layers and cuttings. Dr. Solander was assured by the oldest inhabitants of Otaheite and the adjoining islands, that they well remember there was formerly plenty of the seed-bearing bread-fruit; but they had been neglected upon account of the preference given to the bread-fruit without seeds, which they propagate by suckers.

#### CASHEW-NUT TREE. ANACARDIUM.

ANACARDIUM, the cashew-nut tree, is a genus of the monogynia order, belonging to the decandria class, of plants; and in the natural method ranking under the twelfth order, holoraceæ. The characters are: The calyx is divided into five parts, the divisions ovate and deciduous; the corolla consists of five reflected petals, twice the length of the calyx; the stamens consist of ten capillary filaments shorter than the calyx, one of them castrated; the antheræ are small and roundish: the pistil has a roundish germen; the stylus is subulated, inflected, and the length of the corolla; the stigma oblique: there is no pericarpium; the receptaculum is very large and fleshy: the seed is a large kidney-shaped nut, placed above the receptaculum.

Of this only one species is as yet known to the botanists, viz. the *occidentale*. It grows naturally in the West Indies, and arrives at the height of 20 feet in those places of which it is a native; but cannot be preserved in Britain without the greatest difficulty. The fruit of this tree is as large as an orange; and is full of an acid juice, which is frequently used in making punch. To the apex of this fruit grows a nut, of the size and shape of a hare's kidney, but much larger at the end which is next the fruit than at the other. The shell is very hard; and the kernel, which is sweet and pleasant, is covered with a thin film. Between this and the shell is lodged a thick, blackish, inflammable, liquor, of such a caustic nature in the fresh nuts, that, if the lips chance to touch it, blisters will immediately follow. The kernels are eaten raw, roasted, or pickled. The caustic liquor just mentioned is esteemed an excellent cosmetic with the West-India young ladies, but they must certainly suffer a great deal of pain in its application; and, as fond as our British females are of a beautiful face, it is highly probable they would never submit to be flogged alive to obtain one. When any of the former fancy themselves too much tanned by the scorching rays of the sun, they gently scrape off the thin outside of the shell, and then rub their faces all over with the stone. Their faces immediately

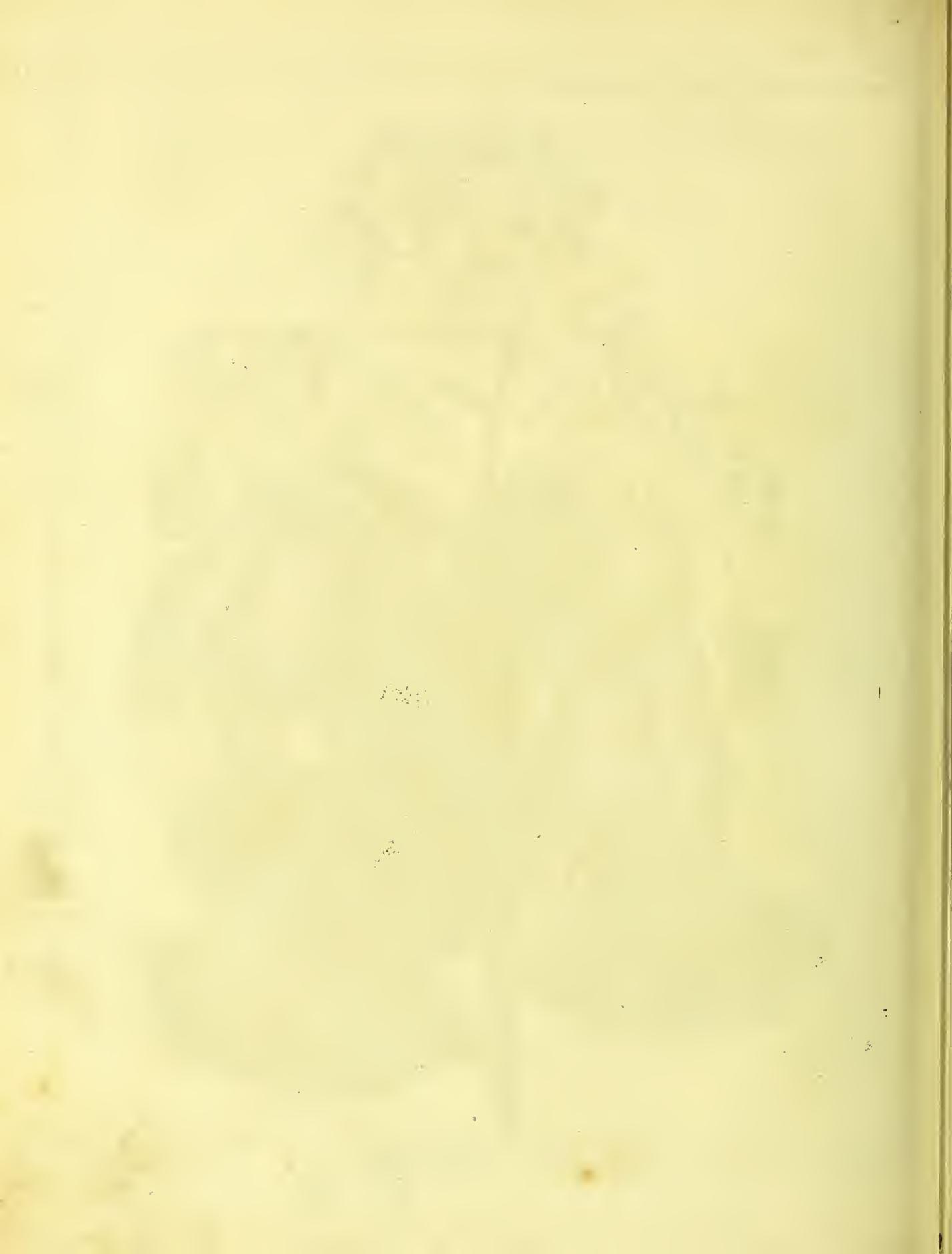
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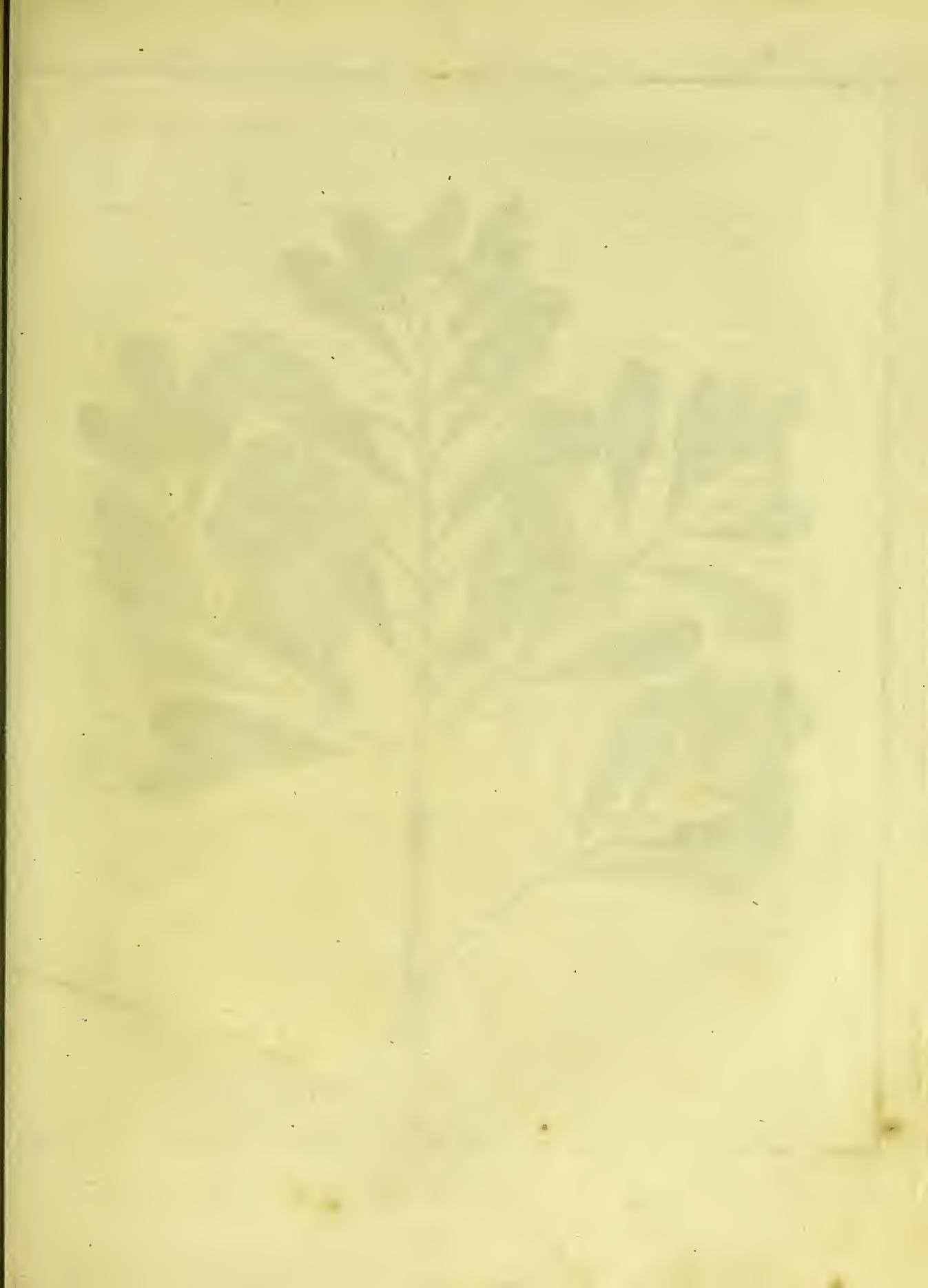


Woolf del.

The Cashew Nut Tree.

Miss Sculps.







Dodd del.

*Cunella Alba?*

W. C. Cope

swell and grow black: and the skin, being poisoned by the caustic oil above-mentioned, will in the space of five or six days come entirely off in large flakes, so that they cannot appear in public in less than a fortnight, by which time the new skin looks as fair as that of a new-born child. The negroes in Brasil cure themselves effectually of disorders in the stomach by eating of the yellow fruit of this tree; the juice of which, being acid, cuts the thick tough humours which obstructed the free circulation of the blood, and thus removes the complaint. This cure, however, is not voluntary: for their masters, the Portuguese, deny them any other sustenance; and letting them loose to the woods, where the cashew-nuts grow in great abundance, leave it in their option to perish by famine, or sustain themselves with this fruit. The milky juice of this tree will stain linen of a good black, which cannot be washed out.

This plant is easily raised from the nuts, which should be planted each in a separate pot filled with light sandy earth, and plunged into a good hot-bed of tanners' bark; they must also be kept from moisture till the plants come up, otherwise the nuts are apt to rot. If the nuts are fresh, the plants will come up in about a month; and in two months more they will be four or five inches high, with large leaves: from which quick progress many people have been deceived, imagining they would continue the like quick growth afterwards; but, with all the care that can be taken, they never exceed the height of two feet and a half, and for the most part scarcely half as much. The Indians eat the nuts slightly roasted, dipped in water or wine, and sprinkled with salt, as a provocative to venery, to which they are found a most remarkable stimulus. The juice will stop a diarrhoea, and cure a diabetes; and the oil is used by painters to give their colours a lasting black, and to preserve wood from putrefaction.

#### CANELLA ALBA, or WHITE CINNAMON.

THE canella is a genus of the monogynia order, belonging to the dodecadria class, of plants; and in the natural method ranking under the twelfth order, holopæcæ. The calyx is three-lobed; the petals are five; the antheræ sixteen, growing to an urceolated or bladder-shaped nectarium; and the fruit is a tricocular berry, with two seeds. There is but one species, the *alba*; which grows usually about twenty feet high, and eight or ten inches in thickness, in the thick woods of most of the Bahama islands. The leaves are narrow at the stalk, growing wider at their ends, which are broad and rounding, having a middle rib only; they are very smooth, and of a light shining green. In May and June the flowers, which are pentapetalous, come forth in clusters at the ends of the branches: they are red, and very fragrant; and are succeeded by round berries, of the size of large pease, green, and when

ripe (which is in February) purple, containing two shining black seeds, flat on one side, otherwife not unlike in shape to a kidney-bean: these seeds in the berry are enveloped in a slimy mucilage. The whole plant is very aromatic, the bark particularly, being more used in distilling, and in greater esteem, in the more northern parts of the world than in Britain.

The bark is the canella alba of the shops. It is brought to us rolled up into long quills, thicker than cinnamon, and both outwardly and inwardly of a whitish colour, lightly inclining to yellow. Infusions of it in water are of a yellowish colour, and smell of the canella; but they are rather bitter than aromatic. Tinctures in rectified spirit have the warmth of the bark, but little of its smell. Proof-spirit dissolves the aromatic as well as the bitter matter of the canella, and is therefore the best menstruum.

The canella is the interior bark freed from an outward thin rough one, and dried in the shade. The shops distinguish two sorts of canella, differing in the length and thickness of the quills: they are both the bark of the same tree; the thicker being taken from the trunk, and the thinner from the branches. This bark is a warm pungent aromatic, though not of the most agreeable kind; nor are any of the preparations of it very grateful.

Canella alba is often employed where a warm stimulant to the stomach is necessary, and as a corrector of other articles. It is now, however, little used in compositions by the London College; the only officinal formula which it enters being the pulvis aloeticus: but with the Edinburgh College it is an ingredient in the tinctura amara, vinum amarum, vinum rhei, &c. It is useful as covering the taste of some other articles.—This bark has been confounded with that called winter's bark, which belongs to a very different tree.

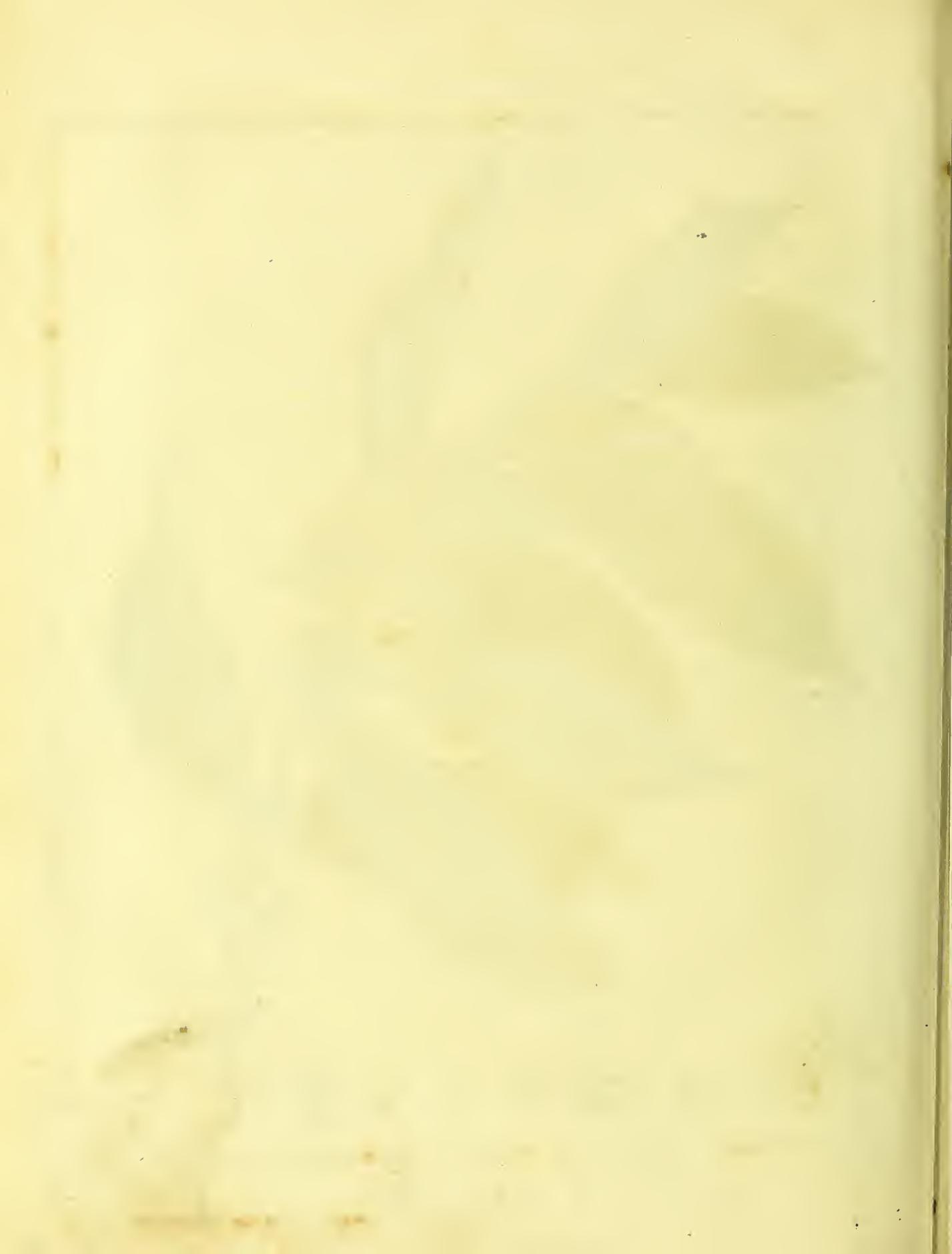
#### COFFEE-TREE. COFFEA.

THE coffee-tree is supposed to be a native of Arabia Felix. It seldom rises more than sixteen or eighteen feet in height; the main stem grows upright, and is covered with a light-brown bark; the branches are produced horizontally and opposite, crossing each other at every joint; so that every side of the tree is fully garnished with them, and they form a sort of pyramid. The leaves also stand opposite; and, when fully grown, are about four or five inches long, and two broad in the middle, decreasing toward each end; the borders are waved, and the surface is of a lucid green. The flowers are produced in clusters at the root of the leaves, fitting close to the branches; they are tubulous, and spread open at the top, where they are divided into five parts; they are of a pure white, and have a very grateful odour, but are of short duration. The fruit, which is the only useful part, resembles a cherry.

It



The Coffee Tree.



It grows in clusters, and is ranged along the branches under the axillæ of the leaves, of the same green as the laurel, but something longer. When it comes to be of a deep red, it is gathered for the mill, in order to be manufactured into those coffee-beans now so generally known. The mill is composed of two wooden rollers furnished with iron plates eighteen inches long, and ten or twelve in diameter. These moveable rollers are made to approach a third which is fixed, and which they call the chops. Above the rollers is a hopper, in which they put the coffee, from whence it falls between the rollers and the chops, where it is stripped of its first skin, and divided into two parts, as may be seen by the forms of it after it has undergone this operation; being flat on the one side and round on the other. From this machine it falls into a brass sieve, where the skin drops between the wires, while the fruit slides over them into baskets placed ready to receive it: it is then thrown into a vessel full of water, where it soaks for one night, and is afterwards thoroughly washed. When the whole is finished, and well dried, it is put into another machine called the peeling-mill. This is a wooden grinder, turned vertically upon its trendle by a mule or a horse. In passing over the coffee it takes off the parchment, which is nothing but a thin skin that detaches itself from the berry in proportion as it grows dry. The parchment being removed, it is taken out of this mill to be put into another, which is called the winnowing-mill. This machine is provided with four pieces of tin fixed upon an axle, which is turned by a slave with considerable force; and the wind that is made by the motion of these plates clears the coffee of all the pellicles that are mixed with it. It is afterwards put upon a table, where the broken berries, and any filth that may remain among them, are separated by negroes; after which the coffee is fit for sale. The coffee-tree is cultivated in Arabia, Persia, the East-Indies, the Isle of Bourbon, and several parts of America. It is also raised in botanic gardens in many parts of Europe. Prince Eugene's garden at Vienna produced more coffee than was sufficient for his own consumption. It delights particularly in hills and mountains, where its root is almost always dry, and its head frequently watered with gentle showers. It prefers a western aspect, and ploughed ground without any appearance of grafts. The plants should be placed at eight feet distance from each other, and in holes twelve or fifteen inches deep. If left to themselves, they would rise to the height of sixteen or eighteen feet, as already observed; but they are generally stunted to five, for the conveniency of gathering their fruit with the greater ease. Thus dwarfed, they extend their branches so, that they cover the whole spot round about them. They begin to yield fruit the third year, but are not in full bearing till the fifth. With the same infirmities that most other trees are subject to, these are likewise in danger of being destroyed by a worm or by the scorching rays of the sun. The hills where the coffee-trees are found have generally

nerally a gravelly or chalky bottom. In the last, it languishes for some time and then dies: in the former, its roots, which seldom fail of striking between stones, obtain nourishment, and keep the tree alive and fruitful for thirty years. This is nearly the period for plants of the coffee-tree. The proprietor, at the end of this period, not only finds himself without trees, but has his land so reduced, that it is not fit for any kind of culture; and, unless he is so situated, that he can break up a spot of virgin land, to make himself amends for that which is totally exhausted by the coffee-trees, his loss is irreparable.

The coffee produced in Arabia is found so greatly to excel that raised in the American plantations or elsewhere, that the cultivation of the tree is now but seldom practised in any of the British colonies. Large plantations of this kind were formerly made in some of them; and it was proposed to the parliament to give a proper encouragement for cultivating this commodity there, so as to enable the planters to undersell the importers from Arabia. Accordingly there was an abatement of the duty payable on all coffee imported from our colonies in America, which at that time was supposed to be sufficient encouragement for this kind of commerce; but the inferiority of the American coffee to the Arabian almost ruined the project. The late Mr. Miller proposed some improvements in the method of cultivation. According to him, the trees are planted in too moist a soil, and the berries are gathered too soon. They ought, he says, to be permitted to remain on the trees till their skins are shrivelled, and they fall from the trees when shaken. This will indeed greatly diminish their weight, but the value of the commodity will thereby be increased to more than double of that which is gathered sooner. In Arabia, they always shake the berries off the trees, spreading cloths to receive them, and only take such as readily fall at each time. Another cause may be the method of drying the berries. They are, he observes, very apt to imbibe moisture, or the flavour of any thing placed near them. A bottle of rum placed in a closet in which a canister of coffee-berries closely stopped was standing on a shelf at a considerable distance, in a few days so impregnated the berries as to render them very disagreeable: the same has also happened by a bottle of spirit of wine standing in the same closet with coffee and tea, both which were in a few days spoiled by it. Some years ago, a coffee-ship from India had a few bags of pepper put on-board, the flavour of which was imbibed by the coffee, and the whole cargo spoiled. For these reasons, Mr. Miller directs that coffee-berries should never be brought over in ships freighted with rum, nor laid to dry in the houses where sugars are boiled or rum distilled. When they are fully ripe, they should be shaken off while the trees are perfectly dry, and spread upon cloths in the sun, carrying them every evening under cover, to prevent the dews or rain from falling on them. When perfectly dry, they should

have

have their outer skins beaten off, and then be carefully packed up in cloths or bags three or four times double.

The coffee-tree, as we have already observed, is sometimes cultivated in European gardens: but for this it requires the assistance of a stove. It makes a fine appearance at all seasons of the year (being an evergreen), but especially when in flower, and when the berries are red, which is generally in the winter, so that they continue a long time in that state. It is propagated from the berries: but they must be planted immediately when gathered from the tree, for they lose their vegetative quality in a very short time: when they have been sent abroad, they have constantly failed in those that have been a fortnight on their journey; so that, where these trees are desired, the young plants must be sent, if it be at any distance from the place where they grow. The fresh berries may be planted in small pots, and plunged into a hot-bed of tanner's bark. If the bed be of a proper temperature, the young plants will appear in a month or five weeks time; and in six weeks more will be ready for transplanting into several pots. During summer, they must be frequently watered; but not in too great plenty, otherwise the roots will be apt to rot. The first sign of the plants being disordered is their leaves sweating out a clammy juice; after which they are over-run with insects, that cannot be destroyed till the plants have recovered their health; so that, on the first appearance of these insects, the trees should be removed into fresh earth, and all possible care taken to recover them. The disorders incident to them, generally proceed either from their having been put into large pots, or from the earth about them being too stiff or over-watered. The most proper soil for them is that of a kitchen-garden, which is naturally loose, and not subject to bind, especially if it has constantly been well wrought and dunged.

*Explanation of the Plate.*

*a*, represents the flower, cut open to show the situation of the five filaments, with their summits lying upon them.

*b*, the flower-cup, with its four small indentations, inclosing the germs, or embryo seed-vessel; from the middle of which arises the style, terminated by the two reflexed spongy tops.

*c*, the fruit entire; marked at the top with a puncture, like a navel.

*d*, the fruit open, to show that it consists of two seeds; which are surrounded by the pulp.

*e*, the fruit cut horizontally, to show the seeds as they are placed erect, with their flat sides together.

*f*, one of the seeds taken out, with the membrane or parchment upon it.

*g*, the same, with the parchment torn open, to give a view of the seed.

*h*, the seed without the parchment.

The origin of coffee as a common drink is not well known. Some ascribe it to the prior of a monastery ; who, being informed by a goat-herd, that his cattle sometimes browsing on the tree would awake and caper all night, became curious to prove its virtue : accordingly, he first tried it on his monks, to prevent their sleeping at matins. Others, from Sehehabeddin, refer the first use of coffee to the Persians : from whom it was learned in the 15th century by Gemaleddin, mufti of Aden, a city near the mouth of the Red Sea ; and who, having tried its virtues himself, and found that it dissipated the fumes which oppressed the head, inspired joy, opened the bowels, and prevented sleep, without being incommoded by it, recommended it first to his dervises, with whom he used to spend the night in prayer. Their example brought coffee into vogue at Aden ; the professors of the law for study, artisans to work, travellers to walk in the night, in fine, every body at Aden drank coffee. Hence it passed to Mecca ; where first the devotees, then the rest of the people, took it. From Arabia Felix it passed to Cairo. In 1511, Kahie Beg prohibited it, from a persuasion that it inebriated, and inclined to things forbidden. But Sultan Causou soon after took off the prohibition ; and coffee advanced from Egypt to Syria and Constantinople. Thevenot, the traveller, was the first who brought it into France ; and a Greek servant, named Pasqua, brought into England by Mr. Daniel Edwards, a Turkey merchant, in 1652, to make his coffee, first set up the profession of coffee-man, and introduced the drink into this island.

In the year 1714, the magistrates of Amsterdam, in order to pay a compliment to Louis XIV. king of France, presented to him an elegant plant of this rare tree, carefully and judiciously packed up to go by water, and defended from the weather by a curious machine covered with glass. The plant was about five feet high, an inch in diameter in the stem, and was in full foliage, with both green and ripe fruit. It was viewed in the river, with great attention and curiosity, by several members of the Academy of Sciences, and was afterwards carried to the royal garden at Marly, under the care of Monsieur de Jussieu, the king's professor of botany ; who had, the year before, written a memoir, printed in the History of the Academy of Sciences of Paris, describing the characters of this genus, together with an elegant figure of it, taken from a smaller plant, which he had received that year from Mynheer Pancras, burgomaster of Amsterdam, and director of the botanical garden there.

In 1718, the Dutch colony at Surinam began first to plant coffee ; and, in 1722, Monsieur de la Motte Aigron, governor of Cayenne, having business at Surinam, contrived, by an artifice, to bring away a plant from thence, which, in the year 1725, had produced many thousands.

In 1727, the French, perceiving that this acquisition might be of great advantage in their colonies, conveyed to Martinico some of the plants; from whence it most probably spread to the neighbouring islands; for, in the year 1732, it was cultivated in Jamaica, and an act passed to encourage its growth in that island.—Thus was laid the foundation of a most extensive and beneficial trade to the European settlements in the West-Indies.

The preparation of coffee consists in roasting, or giving it a just degree of torrefaction, on an earthen or metalline plate, till it has acquired a brownish hue equally deep on all sides. It is then ground in a mill, as much as serves the present occasion. A proper quantity of water is next boiled, and the ground coffee put into it. After it has just boiled, it is taken from the fire, and, the decoction having stood a while to settle and fine, they pour or decant it into dishes. The ordinary method of roasting coffee amongst us is in a tin cylindrical box full of holes, through the middle whereof runs a spit: under this is a semicular hearth, whereon is a large charcoal-fire: by help of a jack the spit turns swift, and so roasts the berry; being now and then taken up to be shaken. When the oil rises, and it is grown of a dark-brown colour, it is emptied into two receivers made with large hoops whose bottoms are iron plates: there the coffee is shaken, and left till almost cold; and, if it looks bright and oily, it is a sign it is well done.

Very different accounts have been given of the medicinal qualities of this berry. To determine its real effects on the human body, Dr. Percival has made several experiments, the result of which he gives in the following words: "From these observations we may infer, that coffee is slightly astringent, and antiseptic; that it moderates alimentary fermentation, and is powerfully sedative. Its action on the nervous system probably depends on the oil it contains; which receives its flavour, and is rendered mildly empypreumatic, by the process of roasting. Neumann obtained by distillation from one pound of coffee, five ounces five drams and a half of water, six ounces and half a dram of thick fetid oil, and four ounces and two drams of a *caput mortuum*. And it is well known, that rye, torrefied with a few almonds, which furnish the necessary proportion of oil, is now frequently employed as a substitute for these berries.

"The medicinal qualities of coffee seem to be derived from the grateful sensation which it produces in the stomach, and from the sedative powers it exerts on the *vis viva*. Hence it assists digestion, and relieves the head-ach; and is taken in large quantities, with peculiar propriety, by the Turks and Arabians; because it counteracts the narcotic effects of opium, to the use of which those nations are much addicted.

"In

"In delicate habits, it often occasions watchfulness, tremors, and many of those complaints which are denominated nervous. It has been even suspected of producing palsies; and, from my own observation, I should apprehend not entirely without foundation. Slare affirms, that he became paralytic by the too liberal use of coffee, and that his disorder was removed by abstinence from that liquor.

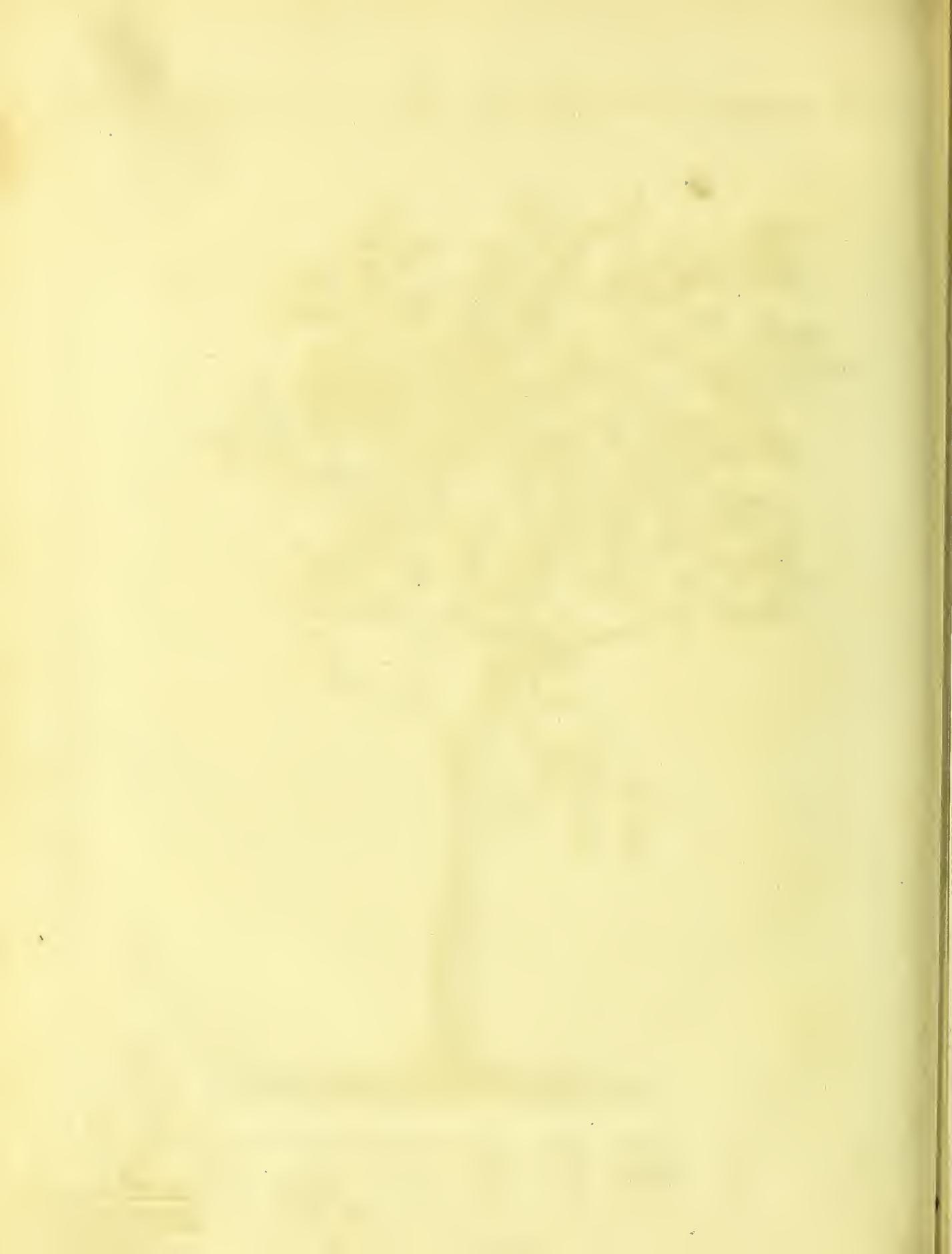
"The following curious and important observation is extracted from a letter with which I was honoured by Sir John Pringle, in April 1773: 'On reading your section concerning coffee, one quality occurred to me which I had observed of that liquor, confirming what you have said of its sedative virtues. It is the best abater of the paroxysm of the periodic asthma that I have seen. The coffee ought to be of the best Mocco, newly burnt, and made very strong immediately after grinding it. I have commonly ordered an ounce for one dish; which is to be repeated fresh after the interval of a quarter or half an hour; and which I direct to be taken without milk or sugar. The medicine in general is mentioned by Mufgrave, in his treatise *De Arthritide anomala*; but I first heard of it from a physician in this place, who, having once practised in Litchfield, had been informed by the old people of that place, that Sir John Floyer, during the latter years of his life, kept free from, or at least lived easy under, his asthma, from the use of very strong coffee. This discovery, it seems, he made after the publication of his book upon that disease.' Since the receipt of that letter, I have frequently directed coffee in the asthma with great success."

#### FORBIDDEN-FRUIT TREE. *CITRUS MEDICA.*

THE forbidden-fruit tree, in trunk, leaves, and flowers, very much resembles the common orange-tree; but the fruit, when ripe, is larger and longer than the biggest orange. It has somewhat the taste of a shaddock; but far exceeds that, as well as the best orange, in its delicious taste and flavour. They are elegant evergreens, rising in this country from about five to ten feet in height; forming full and handsome heads, closely garnished with beautiful large leaves all the year round, and putting forth a profusion of sweet flowers in spring and early in summer; which even in this climate are often succeeded by abundance of fruit that sometimes arrive at tolerable perfection. Though all the varieties were originally obtained by seed, yet the only certain method of continuing the approved varieties is by budding or inarching them on stocks raised from seed to a proper size. As the young trees, however, are brought in plenty from abroad, this method is never practised in this country: but, for curiosity, it may be done by those who are so inclined, in the following manner: Early in the spring procure some kernels, which may be had in plenty from rotten fruits, or others that are properly ripened. Sow the kernels in



*Citrus or Forbidden Fruit Tree.*



March, in pots of rich light earth half an inch deep, and plunge them in a hot-bed, under frames and glasses. Dung or tan may be used, but the latter is preferable, giving air, and frequent sprinklings of water. In two or three weeks, the plants will come up; and, in six or eight weeks more, they will be advanced four or five inches or more in height. You must now give them more air and water; and about the middle of June harden them to the full air, in which let them remain till October; then move them into the green-house, to stand till the spring; and in March or April plant them singly in small pots, being careful to shake them out of the feed-pots with their roots entire. They must be watered immediately after planting; and the watering must be occasionally repeated. After this they are to be treated as woody exotics of the green-house; and in a year or two the largest of those designed for stocks will be fit for budding.

The operation for budding is performed in the month of August, and is done in the common way; only the buds must be taken from trees of a good kind that bear well. As soon as the operation is finished, the pots with their plants must be placed in the green-house, or in a glass-case; or, where there is the convenience of a spare bark-pit, where the heat of the bark is almost exhausted, the pots may be plunged therein for two or three weeks. In either case, however, the air must be admitted freely by opening the front glasses; allowing also a slight shade of mats in the middle of hot sunshine days, and supplying them with water every two or three days during this kind of weather. In three or four weeks the buds will be united with the stock; when it will be proper to loosen the bandages, that they may have room to swell; the buds, however, will all remain dormant till the next spring. They may also be propagated by inarching, which is done in the common way; but the method of budding is found to produce much handomer trees, and therefore is to be preferred. But the most cheap and expeditious method of procuring a collection of these kinds of trees, is by having recourse to such as are imported from Spain, Italy, and Portugal. These come over in chefts, without any earth to their roots, having their roots and heads a little trimmed: they are commonly from one inch to two or three in diameter in the stem; from two to four or five feet in height: and by the assistance of a bark-bed, they readily take root and grow freely, forming as good trees in two years as could be raised here by inarching or budding in fifteen or twenty. They are sold in the Italian warehouses in London. Their price is from three shillings to a guinea each, according to their size; and they are generally advertised as soon as they arrive, which is early in the spring, and the sooner the better. In the choice of these trees, it must be observed, that they are commonly budded at such height in the stem as to form heads from about two to four or five feet high; and, as they are frequently furnished with two buds, one on each side of the stem,

these should be chosen preferably to others; as they will form the most regular heads. Preparatory to their planting, they must be placed for a day or two in tubs of water to plump their bark and roots; after this they must be washed and cleaned, their branches trimmed to half a foot long, and the roots freed from diseased parts, and all the small dried fibres. Then they are to be planted in pots filled with light rich earth; and plunged in a tan-bed, where they are to remain for three or four months; after which they are to be trained to the open air, but will not bear it longer than from the end of May till the middle or end of October.

Sometimes these trees, instead of being kept in pots or tubs, are planted in the full ground; and, where this can be done, it is by far the most eligible method. Where this is intended, there must be frames erected for the support of glafs and other covers, to defend the plants during inclement weather; and in this situation the trees generally shoot strong, produce large fruit, and may be trained either as wall or standard trees. A south wall, in a dry situation, is proper for training them as wall-trees; against which may be erected wooden frame-work sloping, either fixed or moveable, for the support of glafs frames for winter; likewise, for the greater protection of the trees in severe frosts, there may be a fire-place with a flue or two carried along a low wall in the fronts and ends. To have the trees as standards, a more spacious and lofty glafs-cafe should be erected against the wall, in the manner of a hot-house, but higher; in this one or two rows may be planted, suffering them to run up as standards, with only some necessary pruning just to preserve their regularity. In some places there are lofty moveable glafs-cafes, so that two or three rows of trees are planted in a conspicuous part of the pleasure-ground. In winter the frame is put over them, and in summer wholly taken away. The flowering and fruit-setting season of all the sorts of citrus is in June and July. They are often greatly loaded with blossoms; and, when these stand very thick, it is proper to thin them a little, taking off the smallest. It is also to be observed, that, as the trees continue blowing and setting their fruit for three months, when a full crop of fruit is set, it is of benefit to the trees and fruit to gather off the superabundant blossoms as they are produced, though some permit them to remain on account of their appearance.

### GARCINIA, OR MANGOSTAN.

THE Garcinia is a genus of the monogynia order, belonging to the dodecandria class, of plants; and in the natural method ranking under the 18th order, bicornes. The calyx is tetraphylous inferior; there are four petals; the berries are o&ospermous, and crowned with a shield-like stigma. The mangostana, which is the principal



*The Garcinia mangostana.*

London, published as the act directs April 2 1800 by J. Walker.



cipal species, is a tree of great elegance, and producing the most pleasant fruit of any yet known.

This tree has been very accurately described by Dr. Garcin, in honour of whom, as its most accurate describer, Linnæus gave it the name *Garcinia* in the 35th volume of the Philosophical Transactions. It grows, he informs us, seventeen or eighteen feet high, "with a straight taper stem like a fir," having a regular tuft in form of an oblong cone, composed of many branches and twigs, spreading out equally on all sides, without leaving any hollow. Its leaves, he observes, are oblong, pointed at both ends, entire, smooth, of a shining green on the upper-side, and of an olive on the back. Its flower is composed of four petals, almost round, or a little pointed: their colour resembles that of a rose, only deeper and less lively. The calyx of this flower is of one piece, expanded, and cut into four lobes. The two upper lobes are something larger than the lower ones; they are greenish on the outside, and of a fine deep red within: the red of the upper ones is more lively than that of the lower ones. This calyx incloses all the parts of the flower; it is supported by a pedicle, which is green, and constantly comes out of the end of a twig above the last pair of leaves. The fruit is round, of the size of a small orange, from an inch and a half to two inches in diameter. The body of this fruit is a capsule of one cavity, composed of a thick rind a little like that of a pomegranate, but softer, thicker, and fuller of juice. Its thickness is commonly a quarter of an inch. Its outer colour is of a dark-brown purple, mixed with a little grey and dark-green. The inside of the peel is of a rose colour, and its juice is purple. Last of all, this skin is of a styptic or astringent taste, like that of a pomegranate, nor does it stick to the fruit it contains. The inside of this fruit is a furrowed globe, divided into segments, much like those of an orange, but unequal in size, which do not adhere to each other. The number of these segments is always equal to that of the rays of the top which covers the fruit. The fewer there are of these segments, the bigger they are. There are often in the same fruit segments as big again as any of those that are on the side of them. These segments are white, a little transparent, fleshy, membranous, full of juice like cherries or raspberries, of a taste of strawberries and grapes together. Each of the segments incloses a seed of the figure and size of an almond stripped of its shell, having a protuberance on one of its sides. These seeds are covered with two small skins, the outermost of which serves for a basis to the filaments and membranes of which the pulp is composed. The substance of these seeds comes very near to that of chestnuts, as to their consistency, colour, and astringent quality.

" This tree (according to our author) originally grows in the Molucca islands, where it is called mangostan; but has been transplanted from thence to the islands of

of Java and Malacca, at which last place it thrives very well. Its tuft is so fine, so regular, so equal, and the appearance of its leaves so beautiful, that it is at present looked upon at Batavia as the most proper for adorning a garden, and affording an agreeable shade. There are few seeds, however, (he observes,) to be met with in this fruit that are good for planting, most part of them being abortive." — He concludes his description by mentioning, that one may eat a great deal of this fruit without any inconvenience; and that it is the only one which sick people may be allowed to eat without any scruple.

Other writers concur in their praises of this fruit. Rumphius observes, that the mangostan is universally acknowledged to be the best and wholesomest fruit that grows in India; that its flesh is juicy, white, almost transparent, and of as delicate and agreeable a flavour as the richest grapes; the taste and smell being so grateful, that it is scarcely possible to be cloyed with eating it.— He adds, that, when sick people have no relish for any other food, they generally eat this with great delight; but, should they refuse it, their recovery is no longer expected. " It is remarkable (says he) that the mangostan is given with safety in almost every disorder. The dried bark is used with success in the dysentery and tenesmus; and an infusion of it is esteemed a good gargle for a sore mouth or ulcers in the throat. The Chinese dyers use this bark for the ground or basis of a black colour, in order to fix it the firmer."

According to Captain Cook, in his Voyage round the World, vol. iii. p. 737, the *Garcinia mangostana* of Linnæus is peculiar to the East-Indies. It is about the size of the crab-apple, and of a deep red-wine colour. On the top of it is the figure of five or six small triangles joined in a circle; and at the bottom several hollow green leaves, which are remains of the blossom. When they are to be eaten, the skin, or rather flesh, must be taken off; under which are found six or seven white kernels, placed in a circular order; and the pulp with which these are enveloped is the fruit, than which nothing can be more delicious. It is a happy mixture of the tart and the sweet, which is no less wholesome than pleasant; and, as well as the sweet orange, is allowed in any quantity to those who are afflicted with a fever either of the putrid or inflammatory kind.

#### MANCHINEEL-TREE. HIPPOMANE.

THIS is a genus of the adelphia order, belonging to the monœcia class, of plants; and in the natural method ranking under the 38th order, tricoccæ. The male has an amentum and bifid perianthium, without any corolla; the female perianthium is trifid; there is no corolla: the stigma is tripartite; and the plum or capsule tricoccous.

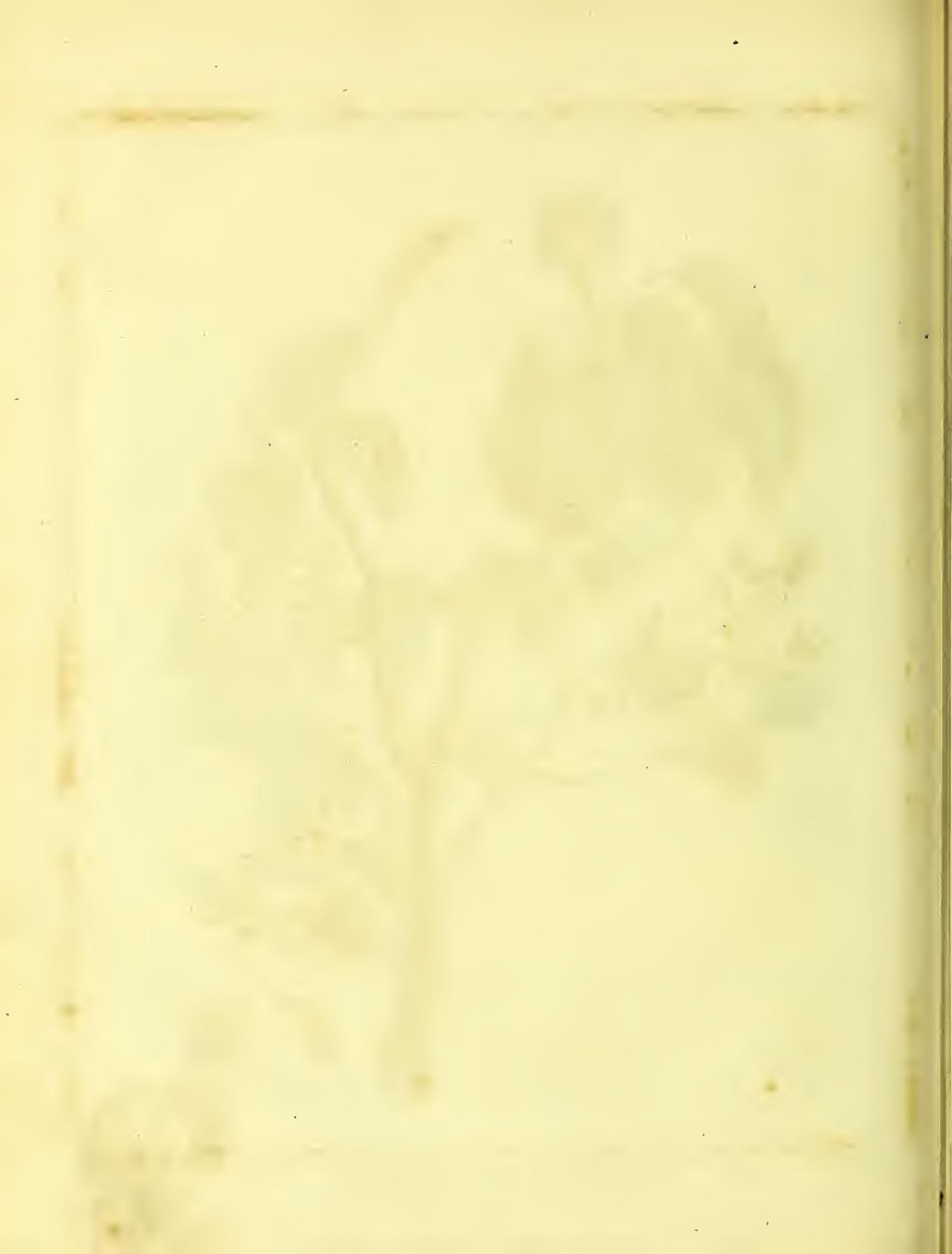
*Species.* 1. The mancinella with oval sawed leaves is a native of all the West-India islands. It has a smooth brownish bark; the trunk divides upwards into ma-

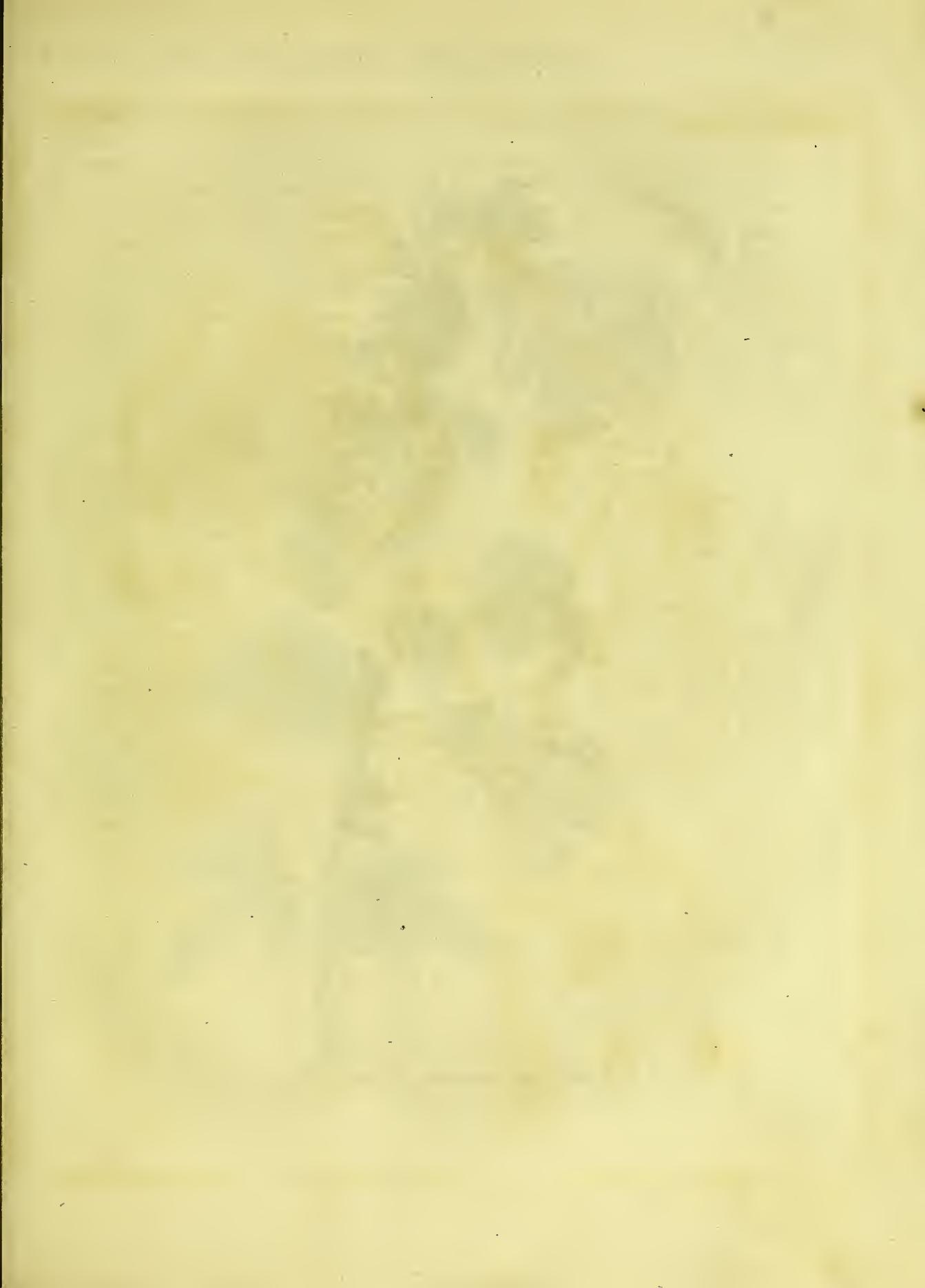


The Manchineel Tree?

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J. P. Gay, sculp.

The Surinam Marsh Malloes.

ny branches, garnished with oblong leaves about three inches long. The flowers come out in short spikes at the end of the branches, but make no great appearance, and are succeeded by fruit of the same shape and size with a golden pippin. The tree grows to the size of a large oak. 2. The *biglandulosa*, with oblong bay leaves, is a native of South America; and grows to as large a size as the first, from which it differs mostly in the shape of its leaves. 3. The *spinoza*, with holly-leaves, is a native of Campeachy, and seldom rises above twenty feet high; the leaves greatly resemble those of the common holly, and are set with sharp prickles at the end of each indenture. They are of a lucid green, and continue all the year.

*Culture.* These plants, being natives of very warm climates, cannot be preserved in this country without a stove; nor can they by any means be made to rise above five or six feet high even with that assistance. They are propagated by seeds; but must have very little moisture, or they will certainly be killed by it.

*Properties.* These trees have a very poisonous quality, abounding with an acrid milky juice of a highly caustic nature. Strangers are often tempted to eat the fruit of the first species; the consequences of which are, an inflammation of the mouth and throat, pains in the stomach, &c. which are very dangerous, unless remedies are speedily applied. The wood is much esteemed for making cabinets, book-cases, &c. being very durable, taking a fine polish, and not being liable to become worm-eaten: but, as the trees abound with a milky caustic juice already mentioned, fires are made round their trunks to burn out this juice; otherwise those who fell the trees would be in danger of losing their sight by the juice flying in their eyes. This juice raises blisters on the skin wherever it falls, turns linen black, and makes it fall out in holes. It is also dangerous to work the wood after it is fawn out; for, if any of the saw-dust happens to get into the eyes of the workmen, it causes inflammations and the loss of sight for some time; to prevent which, they generally cover their faces with fine lawn during the time of working the wood. It is with the juice of this tree that the Indians used to poison their arrows.

#### MARSH-MALLOW OF SURINAM. ALTHÆA.

THIS plant is called at Surinam *okkerum*, and is an elegant species of the marsh-mallow, so well known to botanists. It grows about six feet high, and bears double flowers, some of which are yellow and white, and others red.—If the fruit be cut, a milky liquor drops out, clammy and in the form of threads; which they boil and make a drink of in America, being famous for internal bruises, and for most diseases of the stomach and bowels.

Besides this, there are three other species of the marsh-mallow, which I shall here describe. 1. The *officinalis*, or common marsh-mallow, is a native of Britain, and

has a perennial root, and an annual stalk, which perishes every autumn. The stalks grow erect to the height of four or five feet. These are garnished with leaves, which are hoary, soft to the touch, and placed alternately on the branches. The flowers come out from under the wings of the leaves, like the mallow, and are of a purplish white. 2. The *hirfuta*, or hairy marsh-mallow, is a native of Spain and Portugal. It is a low plant, whose branches trail on the ground, unless they are supported by stakes. The leaves and stalks are beset with strong hairs; the flowers come out like those of the common sort, but are smaller, and have purplish bottoms. 3. The *cannabina*, or shrubby marsh-mallow, is a native of Hungary and Istria. It has a woody stem, which rises to the height of four or five feet: and puts out many side-branches. The flowers come out in the same manner as in the others, but are of a deeper red colour. This sort seldom flowers the first year, unless the summer proves warm: but when the plants live through the winter, they will flower early in the following summer, and produce good seeds.

*Culture.* Though the *officinalis* is found naturally in salt marshes, it will thrive when transplanted into any soil, or in any situation; however, it will always grow larger in a moist than in a dry soil. It may be propagated either by parting the roots in autumn when the stalks decay, or by sowing the seeds in the spring. If the seeds of the second species are sown in April, the plants will flower in July, and carry ripe seed in September. They ought to be sown in the places where they are to remain, as the roots shoot deep in the ground: so that, unless the plants are removed very young, they seldom survive it. The seeds of the *cannabina* ought also to be sown where the plants are to remain, for the reason just now given. They should have a sheltered situation and a dry soil, otherwise they will not live through the winter. Indeed they seldom continue in this country above two years, with all the care that can be taken of them.

*Medicinal Uses.* The *officinalis* is the only species used in medicine. The whole plant, especially the root, abounds with a mild mucilage. It has the general virtues of an emollient medicine; and proves serviceable in a thin acrimonious state of the juices, and where the natural mucus of the intestines is abraded. It is chiefly recommended in sharp fluxions upon the lungs, hoarseness, dysenteries; and likewise in nephritic and calculous complaints; not, as some have supposed, that this medicine has any peculiar power of dissolving or expelling the calculus; but as, by lubricating and relaxing the vessels, it procures a more free and easy passage. The root is sometimes employed externally for softening and maturing hard tumours; chewed, it is said to give ease in difficult dentition of children.

This root gave name to an *officinal* syrup, decoction, and ointment; and was likewise an ingredient in the compound powder of gum tragacanth and the oil and plaster of mucilages. But of all these formulae the syrup alone is now retained.





Dodd delin.

1. The Mandrake. 2. *Mimosa cinerea*. 3. *Mimosa non descript.*

W. J. Sculps.

## MANDRAKE. ATROPA.

THE fruit of this plant has been much recommended in cases of barrenness. Its fresh root is a violent purge, the dose being from ten grains to twenty in substance, and from half a dram to a dram in infusion. It has been found to do service in hysterical complaints; but must be used with great caution, otherwise it will bring on convulsions, and many other mischievous symptoms. It has also a narcotic quality. At present only the fresh leaves are sometimes used in anodyne and emollient cataplasms and fomentations. It used to be an ingredient in one of the old officinal unguents; but both that and the plant itself are now rejected from our pharmacopœias. It still however retains a place in the foreign ones, and may perhaps be considered as deserving farther attention.

Naturalists tell strange stories of this plant: but, setting aside its soporiferous virtue, the modern botanists will scarcely warrant any of them, nor even that human figure ordinarily ascribed to its roots, especially since the discovery of the artifice of charlatans in fashioning it, to surprise the credulity of the people. The figure given in the annexed plate, fig. 1. however, was taken from a genuine root.

Moses informs us (Gen. xxx. 14.) that Reuben, the son of Leah, being in the field, happened to find mandrakes, which he brought home to his mother. Rachael had a mind to them, and obtained them from Leah, upon condition that she should consent that Jacob should be Leah's bedfellow the night following. The term *dudaim*, here made use of by Moses, is one of those words of which the Jews at this day do not understand the true signification. Some translate it violets, others lilies, or jessamine. Junius calls it agreeable flowers; Codurquus makes it truffle, or mushroom; and Calmet will have it to be the citron. Those that would support the translation of mandrakes plead, that Rachael being barren, and having a great desire to conceive, coveted Leah's mandrakes, it may be presumed, with a view to its prolific virtues. The ancients have given to mandrakes the name of the apples of love, and to Venus the name of Mandragoritis; and the Emperor Julian, in his epistle to Calixenes, says, that he drinks the juice of mandrakes to excite amorous inclinations.

## MIMOSA, OR SENSITIVE PLANT,

IS a genus of the polygamia order, belonging to the monœcia class, of plants; and in the natural method ranking under the thirty-third order, lomentaceæ. The hermaphrodite cylix is quinquedentate; the corolla quinquefid; there are five or more stamens, one pistil, and a legume: the male calyx is quinquedentate; the corolla quinquefid; with five, ten, or more, stamens. The name *mimosa* signifies "mimic;"

and

and is given to this genus on account of the sensibility of the leaves, which, by their motion, mimic or imitate, as it were, the motion of animals. To this genus Linnaeus joins many of the acacias; and it comprises near 60 different species, all natives of warm climates. Of the sorts cultivated here in our stoves, &c. some are of the shrub and tree kind, and two or three are herbaceous perennials and annuals. The sensitive kinds are exceedingly curious plants in the very singular circumstance of their leaves receding rapidly from the touch, and running up close together; and in some sorts the footstalks and all are affected, so as instantly to fall downward as if fastened by hinges, which last are called *humble sensitives*. They have all winged leaves, each wing consisting of many small pinnæ. In the *Systema Vegetabilium*, this genus, including the *Mimosas* properly so called, and the *Acacias*, is divided into several sections, distinguished by the figure, situation, and arrangement, of the leaves; as, simple, simply-pinnated, bigeminous and tergeminous, conjugate and pinnated, doubly pinnated. The following are the most remarkable

*Species, with their properties.* 1. The *sensitiva*, or common sensitive humble plant, rises with an under-shrubby prickly stem, branching six or eight feet high, armed with crooked spines; conjugated pinnated leaves, with bijugated lobes or wings, having the inner ones the least, each leaf on a long footstalk; and at the sides and ends of the branches many purple flowers in roundish heads; succeeded by broad flat jointed pods, in radiated clusters.—This is somewhat of the humble sensitive kind; the leaves, footstalks and all, receding from the touch, though not with such facility as in some of the following sorts.

2. The *pudica*, or bashful humble plant, rises with an under-shrubby declinated prickly stem, branching two or three feet around, armed with hairy spines; pinnated digitated leaves, each leaf being of five or more long folioles, attached by their base to a long footstalk, and spread out above like the fingers of a hand; and at the sides and ends of the branches roundish heads of greenish white flowers, succeeded by small jointed prickly pods.—This is truly of the humble sensitive kind; for by the least touch the leaves instantly recede, contract, close, and together with the footstalk quickly decline downward, as if ashamed at the approach of the hand.

3. The *pernambucana*, or slothful mimosæ, has under-shrubby procumbent unarmed stems, branching two or three feet round; bipinnated leaves, of three or four pair of short winged foliola; and at the axillas drooping spikes of pentandrous flowers, the lower ones castrated.—This species recedes very slowly from the touch, only contracting its pinnæ a little when smartly touched; hence the name *slothful mimosæ*.

4. The *asperata*, or Panama sensitive-plant. Of this curious species, which has been well described by Dr. Browne (but not figured), there is a good figure in the

Reliquiæ Houstonianæ, published by Sir J. Banks. It grows in moist places, and on the sides of rivulets, in the parishes of St. James and Hanover, Jamaica. It seldom rises above three feet in height; but its slender branches extend considerably on the neighbouring bushes. It is armed with crooked sharp spines so thickly set on the trunk, branches, and leaves, that there is no touching it with safety. But the plant has a beautiful appearance; the flowers are yellow and globular, growing at the extremity of the branches. The pods are hairy, brown, and jointed; each containing a small, flat, and brown, seed. The leaves are numerous, small, and winged: next to those of the pudica, they are the most irritable; contracting with the least touch, and remaining so for several minutes after. This species would form a good hedge or fence round a garden; and, by being trimmed now and then, may be easily kept from spreading too much.

5. The *punctata*, or punctated sensitive mimosæ, rises with a shrubby upright taper spotted unarmed stem, branching erectly five or six feet high; bipinnated leaves, of four or five pair of long winged folioles, having each about twenty pair of pinnæ; and at the axillas and termination of the branches, oblong spikes of yellowish decandrous flowers, the inferior ones castrated; succeeded above by oblong seed-pods. This sort, though naturally shrubby and perennial in its native soil, yet in this country sometimes decays in winter. It is only sensitive in the foliola, but quick in the motion.

6. The *viva*, lively mimosæ, or smallest sensitive weed, has many creeping roots, and spreads itself so as to cover large spots of ground. It rises at most to two inches, has winged leaves, with numerous small pinnæ. The flower is globular, of a blueish colour, and grows in clusters from the axillæ: these are followed by little short hairy pods, containing smooth shining seeds. This is the most sensible of all the mimosæ, the pudica not excepted. By running a stick over the plant, a person may write his name, and it will remain visible for ten minutes.

7. The *quadrivalvis*, perennial or quadrivalve humble mimosæ, has herbaceous slender quadrangular prickly stems, branching and spreading all around, armed with recurved spines; bipinnated leaves of two or three pair of winged lobes, having each many pinnæ; and at the axillas globular heads of purple flowers, succeeded by quadrivalvular pods. This is of the humble sensitive kind, both leaves and footstalks receding from the touch.

8. The *plena*, annual or double-flowered sensitive mimosæ, rises with an herbaceous erect round unarmed stem, closely branching and spreading every way, three or four feet high; bipinnated leaves of four or five pair of winged lobes, of many pairs of pinnæ; and at the axillas and termination of the branches spikes of yellow

pentandrous flowers, the lower ones double; succeeded by short broad pods. This annual is only sensitive in the foliola, but extremely sensible of the touch or air.

9. The *cornigera*, or horned Mexican mimosa, commonly called great horned acacia, has a shrubby upright deformed stem, branching irregularly, armed with very large horn-like white spines, by pairs, connated at the base; bipinnated leaves thinly placed; and flowers growing in spikes. This species is esteemed a curiosity for the oddity of its large spines, resembling the horns of animals, and which are often variously wreathed, twisted, and contorted.

10. The *farneiana*, or fragrant acacia, grows in woodlands and waste lands in most parts of Jamaica; rising to twenty-five or thirty feet, with suitable thickness. The bark of the trunk is brown and scaly, the branches are alternate. It is adorned with bipinnated leaves of a bright-green colour; and yellow globular flowers from the axillæ, of a fragrant smell. The pods are about three inches long, and half an inch broad: they are of a light-brown colour, smooth, compressed, and contain five or six smooth flat seeds. Formerly the flowers of this tree were used as an ingredient in the *theriaca andromachi* of the old dispensatories. The tree is sometimes planted for a hedge or fence round inclosures; and the timber, though small, is useful in rural economy.

11. The *arborea*, or wild tamarind-tree, is common in all the woodlands, and especially near where settlements have been made in Jamaica. It rises to a considerable height, and is proportionally thick. The timber is excellent, and serves many purposes in rural economy: it is of the colour of cedar, pretty hard, and takes a good polish. The leaves are numerous; the flowers globular and white. The pods are about a foot in length, of a fine scarlet colour; when they are ripe they open and become twisted. The seeds then appear; they are oblong, smooth, of a shining black, and quite soft. On the whole, from the leaves, flowers, and pods, this tree exhibits a singular and beautiful contrast. With us this plant is raised in hot-houses; but it appears, that with a little pains it may be made to grow in the open air. A good sizeable tree of this sort grew in the garden of the late Dr. William Pitcairn, at Islington.

12. The *latifolia*, shag-bark, or white wild tamarind. This excellent timber-tree is very common in Jamaica, and rises to a moderate height and good thickness. The trunk is rough and scaly: the leaves are numerous, of a rhomboidal figure, and yellowish cast. The flower-spikes are from the axillæ; their colour is yellow. The seed-vessels are flat, jointed, and twisted. The seeds are of the bigness of a vetch, white, and finely streaked with blue. Of this tree there is a variety which some botanists call *serpentina*. The chief difference is in the leaves, which are smaller, and of a shining dark green.

13. The *lebeck*, or ebony-tree. This is a native of the East-Indies, but raised from seeds in Jamaica and St. Vincent's. It is figured, though not accurately, by Pluckenet, tab. 331. fig. 1. To what height this tree grows, we cannot yet say; but it must be of a considerable thickness, if it be the ebony we have in use here. Time will soon determine this, as the few plants in the islands are reared with great care by Dr. Dancer, in Jamaica, and Mr. Alexander Anderson in St. Vincent's.

14, 15. The *cinerea* and *pinnata*, cashew-bushes. These species are common about Kingston and Spanish-Town, Jamaica, and rise by slender trunks to about twenty feet. See the Plate, fig. 2.

Dr. Roxburgh of Madras, amongst a number of useful discoveries, has found the lac-insect on this species of mimosa. We have seen the native gum-lac on one of the small twigs, and a specimen of the plant in the collection of a gentleman. The plant is a variety of the *cinerea*, and appears rather to be the *pinnata*, Linn. It is to be hoped, that in a short time the useful insect just mentioned may be transported from Asia to the West-Indies, where this gum, or rather wax, may be also produced.

16. The *scandens*, or climbing mimosa; (*Gigalobium scandens*, Browne's Jam. p. 362. *Phaseolus maximus perennis*, Sloane's Jam. 68. *Perim Kaku-valli*, Rheede's Mal. viii. t. 32, 3, 4.) This species of mimosa is frequent in all the upland valleys and woodlands on the north side of Jamaica. It climbs up the tallest trees, and spreads itself in every direction by means of its *cirrhi*, or claspers, so as to form a complete arbour, and to cover the space of an English acre from one root. This circumstance has a bad effect on the trees or bushes so shaded. Light, air, and rain, (so necessary for all plants,) being shut out, the leaves drop off, the tree gradually rots, and the limbs fall down by the weight of this parasite.

The roots of this plant run superficially under the ground or herbage. The trunk is seldom thicker than a man's thigh, and sends off many branches, with numerous shining green leaves, each of which terminates in a tendril or clasper, that serves to fasten it to trees or bushes. The flower-spikes are from the axillæ: they are slender, and the florets on them small and numerous. The pod is perhaps the largest and longest of any in the world; being sometimes eight or nine feet in length, five inches broad, jointed, and containing ten or fifteen seeds. These seeds are brown, shining, flattened, and very hard, and called *cacoons*. They are the same mentioned in the Phil. Transf. N° 222, p. 298, by Sir Hans Sloane, as being thrown ashore on the Hebrides and Orkneys. This happens in the following manner: The seeds, or beans, fall into the rivers, and are conveyed to the sea; the trade-winds carry them westward till they fall into the gulf-stream, which forces them northward along the coast of America and Bahama-islands; as the winds blow frequent and strong from America, these seeds are driven to the eastward, till at length they are thrown

thrown ashore, and left ~~the~~ side. as aforesaid. This bear ~~the~~ is soaked in water, is boiled and eaten by some negroes; but, in general, there seems to be no other use made of it than as a sort of snuff-box.

17. The *catechu*, according to Mr. Ker, grows only to twelve feet in height, and to one foot in diameter; it is covered with a thick rough brown bark, and towards the top divides into many close branches: the leaves are bipinnated, or doubly winged, and are placed alternately upon the younger branches: the partial pinnæ are nearly two inches long, and are commonly from fifteen to thirty pair, having small glands inserted between the pinnæ: each wing is usually furnished with about forty pair of pinnulæ or linear lobes, beset with short hairs: the spines are short, recurved, and placed in pairs at the base of each leaf: the flowers are hermaphrodite and male, and stand in close spikes, which arise from the axillæ of the leaves, and are four or five inches long: the calyx is tubular, hairy, and divides at the limb into five oval pointed segments: the corolla is monopetalous, whitish, and of the same form as the calyx, but twice its length: the filaments are numerous, capillary, double the length of the corolla, adhering at the base of the germen, and crowned with roundish antheræ: the germen is oval, and supports a slender style, which is of the length of the filaments, and terminated by a simple stigma: the fruit, or pod, is lance-shaped, brown, smooth, compressed, with an undulated thin margin; it contains six or eight roundish flattened seeds, which produce a nauseous odour when chewed. From this tree, which grows plentifully on the mountainous parts of Hindooostan, where it flowers in June, is produced the officinal drug long known in Europe by the name of *terra japonica*.

18. The *Nilotica*, or true Egyptian acacia, rises to a greater height than the preceding: the bark of the trunk is smooth, and of a grey colour; that of the branches has commonly a purplish tinge: the leaves are bipinnated, and placed alternately; the partial pinnæ are opposite, furnished with a small gland between the outermost pair, and beset with numerous pairs of narrow elliptical pinnulæ, or leaflets; the spines are long, white, spreading, and proceed from each side of the base of the leaves: the flowers are hermaphrodite and male; they assume a globular shape, and stand four or five together upon slender peduncles, which arise from the axillæ of the leaves: the calyx is small, bell-shaped, and divided at the mouth into five minute teeth: the corolla consists of five narrow yellowish segments: the filaments are numerous, capillary, and furnished with roundish yellow antheræ: the germen is conical, and supports a slender style, crowned with a simple stigma: the fruit is a long pod, resembling that of the lupin, and contains many flattish brown seeds. It is a native of Arabia and Egypt, and flowers in July.

Although

Although the *Mimosa Nilotica* grows in great abundance over the vast extent of Africa, yet gum arabic is produced chiefly by those trees which are situated near the equatorial regions; and we are told that in Lower Egypt the solar heat is never sufficiently intense for this purpose. The gum exudes in a liquid state from the bark of the trunk and branches of the tree, in a similar manner to the gum which is often produced upon the cherry-trees, &c. in this country; and by exposure to the air it soon acquires solidity and hardness. In Senegal the gum begins to flow when the tree first opens its flowers; and continues during the rainy season till the month of December, when it is collected for the first time. Another collection of the gum is made in the month of March, from incisions in the bark, which the extreme dryness of the air at that time is said to render necessary. Gum arabic is now usually imported into England from Barbary; not packed up in skins, which was the practice in Egypt and Arabia, but in large casks, or hogsheads. The common appearance of this gum is well known: and the various figures which it assumes seem to depend upon a variety of accidental circumstances attending its transmutation and concretion. Gum arabic of a pale yellowish colour is most esteemed; on the contrary, those pieces which are large, rough, of a roundish figure, and of a brownish or reddish hue, are found to be less pure, and are said to be produced from a different species of mimosa, (*M. Senegal*;) but the Arabian and Egyptian gum is commonly intermixed with pieces of this kind, similar to that which comes from the coast of Africa near the river Senegal.

Gum arabic does not admit of solution by spirit or oil; but in twice its quantity of water it dissolves into a mucilaginous fluid, of the consistence of a thick syrup; and in this state answers many useful purposes, by rendering oily, resinous, and pungent, substances, miscible with water. The glutinous quality of gum arabic occasions it to be preferred to most other gums and mucilaginous substances, as a demulcent in coughs, hoarsenesses, and other catarrhal affections, in order to obtund irritating acrimonious humours, and to supply the loss of abraded mucus. It has been very generally employed in cases of ardor urinæ and strangury; but it is the opinion of Dr. Cullen, "that even this mucilage, as an internal demulcent, can be of no service beyond the alimentary canal."

19. The *Senegal* is a native of Guinea, and was some time ago introduced into Jamaica. Dr Wright tells us, he saw both this and the *Nilotica*, of the size of a cherry-tree, growing at Dr. Paterson's, in the parish of Hanover, Jamaica. The flowers are globular and fragrant. The pods are brown, and of the size of a goose-quill. The tree, on being wounded, exudes gum arabic, though in less quantity, and less transparent, than that of the *shops*, which is obtained from the *Nilotica* above described. There are above sixty other species.

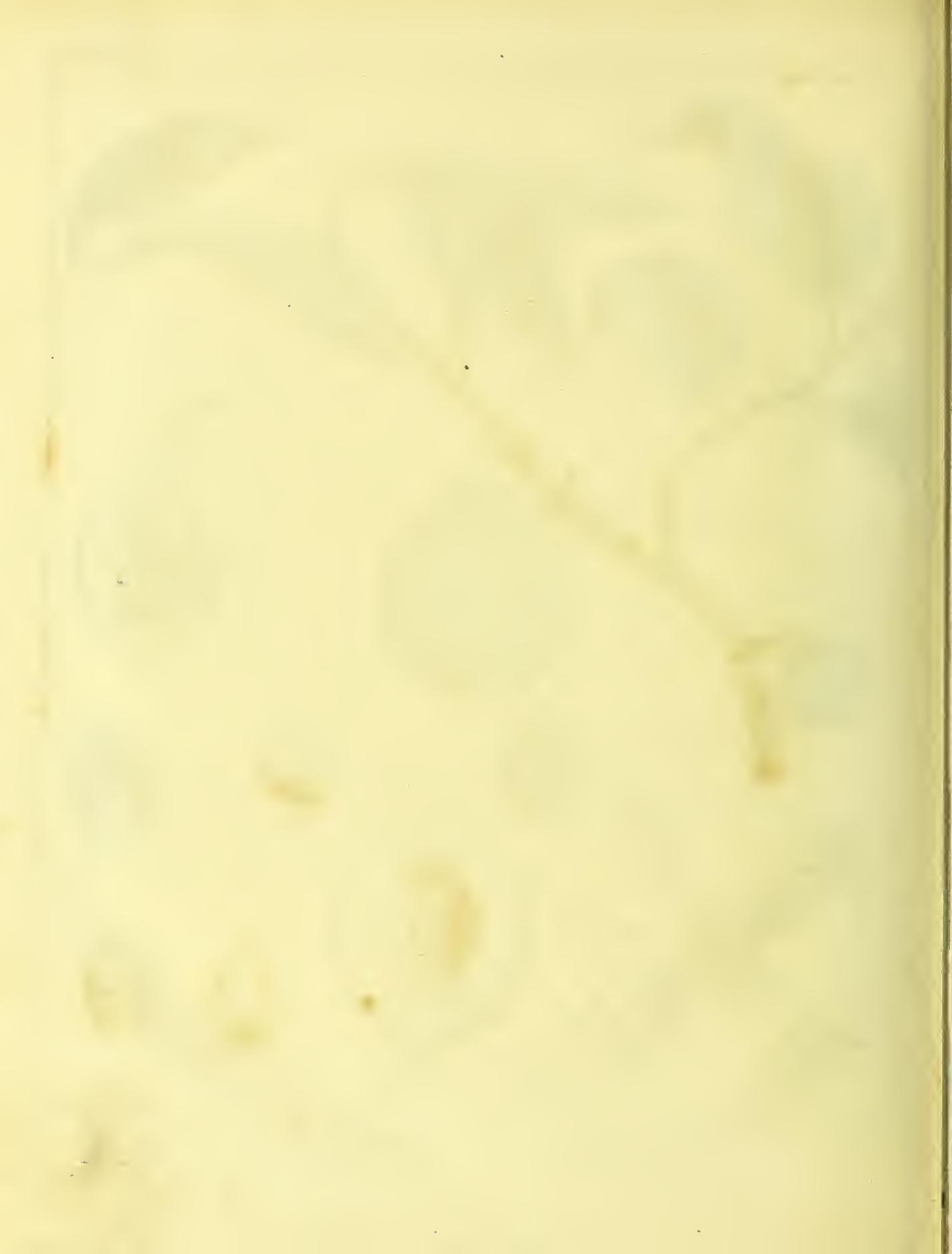
On the annexed Plate, at fig. 3. is delineated a non-descript species of an uncommon size, mentioned by Mr. Paterson in his Travels among the Hottentots, but not particularly described. Like several other Mimosas, it produces gum, which is considered by the natives as a peculiarly delicate species of food: the leaves and lower points of the branches seem to constitute the principal aliment of the camelopardalis; and, from the extent of its boughs, and the smoothness of the trunk, it affords a sufficient defence to a species of gregarious bird against the tribe of serpents and other reptiles which would otherwise destroy its eggs. Mr. Bruce describes two plants which seem referable to this genus; the one named *ergett el dimmo*, the other *ergett el krone*. The former, in our author's opinion, should be named *Mimosa sanguinea*; its name in the Abyssinian language signifying "the bloody ergett," and derived, as he supposes, from its being partly composed of beautiful pink filaments. When the blossoms are fully spread, the upper part of them consists of yellow curled filaments, and the under part of pink filaments of a similar shape. In its unripe state, that part which afterwards becomes pink is of a green colour, and composed of tubercles of a larger size, and more detached, than those which afterwards produce the yellow filaments; the latter being smaller, and closer set together: the leaves are of the double-pinnated kind.

The name of the other species, in the Abyssinian language, signifies *the horned ergett*; which our author supposes to be given it on account of the figure of the pods. The flower very much resembles that of the *Acacia vera* in size and shape, excepting that it is attached to the branch by a strong woody stalk of considerable length, which grows out at the bottom of the branch bearing the leaves, and is sheltered as in a cage by the lower part of it. The branches are all covered with short, strong, and sharp-pointed, thorns, having their points inclined backwards towards the root. The pods are covered with a prickly kind of hair, which easily rubs off with the fingers, sticks to them, and gives a very uneasy sensation. They have thirteen divisions; in each of which are three hard, round, and shining, seeds, of a dusky brown colour. Both of these shrubs shut their leaves on the coming on of the violent rains in the wet season, and never fully expand them till the dry season returns.

### MYRISTICA, OR NUTMEG-TREE.

THE *Myristica*, or nutmeg-tree, is a genus of plants belonging to the class diœcia, order triandria, and of the natural order of lauri. The male calyx is monophyllous, strong, and parted into three lacinii of an oval shape; in the middle of the receptacle rises a column of the height of the calyx, to the upper part of which the





antheræ are attached: they vary in number from three to twelve or thirteen. The female calyx and corolla as in the male, on a distinct tree; the germen of an oval shape; the style short, with a bifid stigma, the lacinii of which are oval and spreading. The fruit is of that sort called *drupa*; it is fleshy, roundish, sometimes unilocular, sometimes bivalved, and bursts when ripe at the side. The seed is enveloped with a fleshy and fatty membranous substance, which divides into filaments; (this in one of the species is the *mace* of the shops.) The seed, or nutmeg, is round or oval shaped, unilocular, and contains a small kernel, variegated on the surface by the fibres running in the form of a screw.

*Species.* There are five species of this genus according to some authors; but, some of these being only varieties, they may be reduced to three, viz.

1. *Myristica fatua*, or wild nutmeg: this grows in Tobago, and rises to the height of an apple-tree; has oblong, lanceolated, downy, leaves, and hairy fruit: the nutmeg of which is aromatic, but when given inwardly is narcotic, and occasions drunkenness, delirium, and madness, for a time.

2. *Myristica sebifera*, (*Virola sebifera*, Aublet, page 904. tab. 345.) A tree frequent in Guiana, rising to forty or even to sixty feet high; on wounding the trunk of which, a thick acrid red juice runs out. Aublet says nothing of the nutmegs being aromatic; he only observes, that a yellow fat is obtained from them, which serves many economical and medical purposes, and that the natives make candles of it.

3. The *Myristica moschata*, or nutmeg, attains the height of thirty feet, producing numerous branches which rise together in stories, and covered with bark which of the trunk is a reddish brown, but that of the young branches is of a bright green colour: the leaves are nearly elliptical, pointed, undulated, obliquely nerved, on the upper side of a bright green, on the under whitish, and stand alternately upon footstalks: the flowers are small, and hang upon slender peduncles, proceeding from the axillæ of the leaves: they are both male and female upon separate trees. M. Schwartz, who has carefully examined this as well as the two first species, preserved in spirits, places them amongst the monadelphus.

The nutmeg has been supposed to be the *comacum* of Theophrastus, but there seems little foundation for this opinion; nor can it with more probability be thought to be the *chrysobalanus* of Galen. Our first knowledge of it was evidently derived from the Arabians; by Avicenna it was called *jiausiban*, or *jauisibani*, which signifies "nut of bands." Rumphius both figured and described this tree; but the figure given by him is so imperfect, and the description so confused, that Linnæus, who gave it the generic name *Myristica*, was unable to assign its proper characters. Sonnerat's account of the *muscadier* is still more erroneous; and the younger Linnæus was

was unfortunately misled by this author, placing the myristica in the class polyan-dria, and describing the corolla as consisting of five petals. Thunberg, who examined the flower of the nutmeg, places it in the class monoecia; and, according to his description, the male flower has but one filament, surrounded at the upper part by the antheræ; and as the filaments are short and slender, and the antheræ united, this mistake might easily arise. M. De La Marck informs us, that he received several branches of the myristica, both in flower and fruit, from the Isle of France, where a nutmeg-tree, which was introduced by Monsieur Poivre in 1770, is now very large, and continually producing flowers and fruit. From these branches, which were sent from Mons. Cere, director of the king's garden in that island, Mons. De La Marck has been enabled to describe and figure this and other species of the myristica with tolerable accuracy; as will appear from the annexed plate, of which the following is an explanation:

Fig. *a*. A sprig with fructification. The drupe of the natural size, and bursting open. Fig. *b*. The full grown fruit cut lengthways. Fig. *c*. Another section of the same. Fig. *d*. The nutmeg enveloped with its covering, the mace. Fig. *e*. The fatty membrane, or mace, spread out. Fig. *f*. The nutmeg of its natural size. Fig. *g*. The same with its external tegument removed at one end. Fig. *h*. The same with its outer tegument entirely removed. Fig. *i*. A transverse section of the nutmeg.

The seed or kernels, called *nutmegs*, are well known, as they have been long used both for culinary and medical purposes. Distilled with water, they yield a large quantity of essential oil, resembling in flavour the spice itself; after the distillation, an insipid sebaceous matter is found swimming on the water; the decoction insipidated, gives an extract of an unctuous, very lightly bitterish, taste, and with little or no astringency. Rectified spirit extracts the whole virtue of nutmegs by infusion, and elevates very little of it in distillation; hence the spirituous extract possesses the flavour of the spice in an eminent degree.

Nutmegs, when heated, yield to the press a considerable quantity of limpid yellow oil, which on cooling concretes into a sebaceous consistence. In the shops we meet with three sorts of unctuous substances called *oil of mace*, though really expressed from the nutmeg. The best is brought from the East-Indies in stone jars; this is of a thick consistence, of the colour of mace, and has an agreeable fragrant smell; the second sort, which is paler coloured, and much inferior in quality, comes from Holland in solid masses, generally flat, and of a square figure: the third, which is the worst of all, and usually called *common oil of mace*, is an artificial composition of siccum, palm-oil, and the like, flavoured with a little genuine oil of nutmeg.

*Method of gathering and preparing Nutmeg.* When the fruit is ripe, the natives ascend the trees, and gather it by pulling the branches to them with long hooks. Some are employed in opening them immediately, and in taking off the green shell or first rind, which is laid together in a heap in the woods, where in time it putrefies. As soon as the putrefaction has taken place, there springs up a kind of mushrooms, called *boleti moschatyni*, of a blackish colour, and much valued by the natives, who consider them as delicate eating. When the nuts are stripped of their first rind, they are carried home, and the mace is carefully taken off with a small knife. The mace, which is of a beautiful red, but afterwards assumes a darkish or reddish colour, is laid to dry in the sun for the space of a day, and then removed to a place less exposed to his rays, where it remains for eight days, that it may soften a little. They afterwards moisten it with sea-water, to prevent it from drying too much, or from losing its oil. They are careful, however, not to employ too much water, lest it should become putrid, and be devoured by worms. It is last of all put into small bags, and squeezed very close.

The nuts, which are still covered with their ligneous shell, are for three days exposed to the sun, and afterwards dried before a fire till they emit a sound when they are shaken; they then beat them with small sticks in order to remove their shell, which flies off in pieces. These nuts are distributed into three parcels: the first of which contains the largest and most beautiful, which are destined to be brought to Europe; the second contains such as are reserved for the use of the inhabitants; and the third contains the smallest, which are irregular or unripe. These are burnt, and part of the rest is employed for procuring oil by pressure. A pound of them commonly gives three ounces of oil, which has the consistence of tallow, and has entirely the taste of nutmeg. Both the nut and mace, when distilled, afford an essential, transparent, and volatile, oil, of an excellent flavour. The nutmegs which have been thus selected would soon corrupt if they were not watered, or rather pickled with lime-water made from calcined shell-fish which they dilute with salt-water till it attain the consistence of fluid pap. Into this mixture they plunge the nutmegs, contained in small baskets, two or three times; till they are completely covered over with the liquor. They are afterwards laid in a heap, where they heat, and lose their superfluous moisture by evaporation. When they have sweated sufficiently, they are then properly prepared, and fit for a sea-voyage.

In the Island of Banda, the fruit of the nutmeg-tree is preserved entire in the following manner: When it is almost ripe, but previous to its opening, it is boiled in water and pierced with a needle. They next lay it in water to soak for ten days, till it has lost its sour and sharp taste. They then boil it gently in a syrup of sugar, to which, if they wish it to be hard, a little lime is added. This operation is repeat-

ed for eight days, and each time the syrup is renewed. The fruit when thus preserved is put for the last time into a pretty thick syrup, and is kept in earthen pots closely shut. These nuts are likewise pickled with brine or with vinegar; and, when they intend to eat them, they first steep them in fresh water, and afterwards boil them in syrup of sugar, &c.

*Uses.* Nutmegs preserved entire are presented as deserts, and the inhabitants of India sometimes eat them when they drink tea. Some of them use nothing but the pulp; others likewise chew the mace; but they generally throw away the kernel, which is really the nutmeg. Many, who perform sea-voyages to the north, chew this fruit every morning. The medicinal qualities of nutmeg are supposed to be aromatic, anodyne, stomachic, and restringent; and, with a view to the last-mentioned effects, it has been much used in diarrhoeas and dysenteries. To many people the aromatic flavour of nutmeg is very agreeable; they however should be cautious not to use it in large quantities, as it is apt to affect the head, and even to manifest an hypnotic power in such a degree as to prove extremely dangerous. Bontius speaks of this as a frequent occurrence in India; and Dr. Cullen relates a remarkable instance of this soporific effect of the nutmeg, which fell under his own observation, and hence concludes, that in apoplectic and paralytic cases this spice may be very improper. He observes, that a person by mistake took two drams or a little more of powdered nutmeg: he felt it warm in his stomach, without any uneasiness; but in about an hour after he had taken it he was seized with a drowsiness, which gradually increased to a complete stupor and insensibility; and not long after he was found fallen from his chair, lying on the floor of his chamber in the state mentioned. Being put to bed, he fell asleep; but, awaking a little from time to time, he was quite delirious; and he thus continued alternately sleeping and delirious for several hours. By degrees, however, both these symptoms diminished; so that in about six hours from the time of taking the nutmeg he was pretty well recovered from both. Although he still complained of head-ach, and some drowsiness, he slept naturally and quietly the following night, and next day was quite in his ordinary health. The officinal preparations of nutmeg are a spirit and essential oil, and the nutmeg in substance roasted, to render it more astringent. Both the spice itself and its essential oil enter several compositions, as the *confectio aromatica*, *spiritus amoniæ com.* &c. Mace possesses qualities similar to those of the nutmeg, but is less astringent, and its oil is supposed to be more volatile and acrid.

*Remarks on the Trade of Nutmegs.* Nutmeg-trees grow in several islands in the Eastern Ocean. The wood-pigeon of the Moluccas is unintentionally a great planter of these trees, and disseminates them in places where a nation, powerful by its commerce, thinks it for its interest that they should be rooted out and destroyed.

The Dutch, whose unweared patience can surmount the greatest obstacles, long appropriated to themselves the crop of nutmegs, as well as that of cloves and cinnamon, growing in the islands of Ternate, Ceylon, &c. either by right of conquest or by paying subsidies to the islanders, who find these much more profitable than the former produce of their trees. It is nevertheless true, that they prevailed upon or compelled the inhabitants of the Moluccas to cut down and root out all the clove-trees, which they preserve only in the islands of Amboyna and Ternate, which are in a great measure subject to them. We know for certain, that the Dutch paid 18,000 rix-dollars yearly to the King of Ternate, by way of tribute or gift, in order to recompense him for the loss of his clove-trees in the other Molucca islands; and that they were moreover bound by treaty to take, at three-pence three-farthings a pound, all the cloves brought by the natives of Amboyna to their magazines. They likewise succeeded in destroying the cinnamon every where except in the island of Ceylon. The same was the case with white pepper, &c. so that the trade of the whole of Europe, and of great part of Asia, in this species of commodity, long passed through their hands.

The Dutch had immense and very rich magazines of these precious aromatics, both in India and Europe. They had actually by them the produce of sixteen years, and never supplied their neighbours with the last, but always with the oldest crop: in 1760 they sold what was laid up in 1744. It is commonly said, that, when the Dutch have too great a quantity of cloves, nutmegs, &c. in their magazines, they throw them into the sea; but the fact is, that they get rid of their superfluous aromatics by burning them. On the 10th of June, 1760, M. Bomare saw at Amsterdam, near the admiralty, a fire, the fuel of which was valued at 8,000,000 of livres; and as much was to be burned the day following. The feet of the spectators were bathed in the essential oil of these substances; but no person was allowed to gather any of it, much less to take any of the spices which were in the fire. Some years before, upon a similar occasion, and at the same place, a poor man who had taken up some nutmegs which had rolled out of the fire, was, as M. Bomare was informed, seized and condemned to immediate execution. We will only add, that notwithstanding the jealousy of the Dutch, and the pains they take to preserve the sale of cloves wholly to themselves, they have never been able to prevent their own officers in several parts of India from embezzling and selling considerable quantities of them. M. de Jaucourt informs us, that, in order to defraud the company, they sell them to the vessels of other nations which they meet at sea, and moisten the remainder with water, that they may still have the number of quintals of which their cargo consisted. The quantity sold may amount to ten quintals in one hundred before it can be perceived by the clerks of the magazines at Batavia, where they are received.

We

We are informed by M. Romé de Lisle, that the English draw a great deal of cinnamon, pepper, and cloves, from the islands of Sumatra. The staple for this commodity is at the factory of Bencoolen. We have likewise seen a specimen of pretty good cinnamon raised at Martinico. The French, to prevent the exportation of specie for these aromatic and exotic productions, have attempted to introduce the culture of them into some of their colonies. A great many plants of the clove and nutmeg-tree have been procured, and planted in the Isle of France, the Island of Bourbon, and also at Cayenne, where they have a very promising appearance.

#### FLOWERING PAVONIS. CÆSALPINIA.

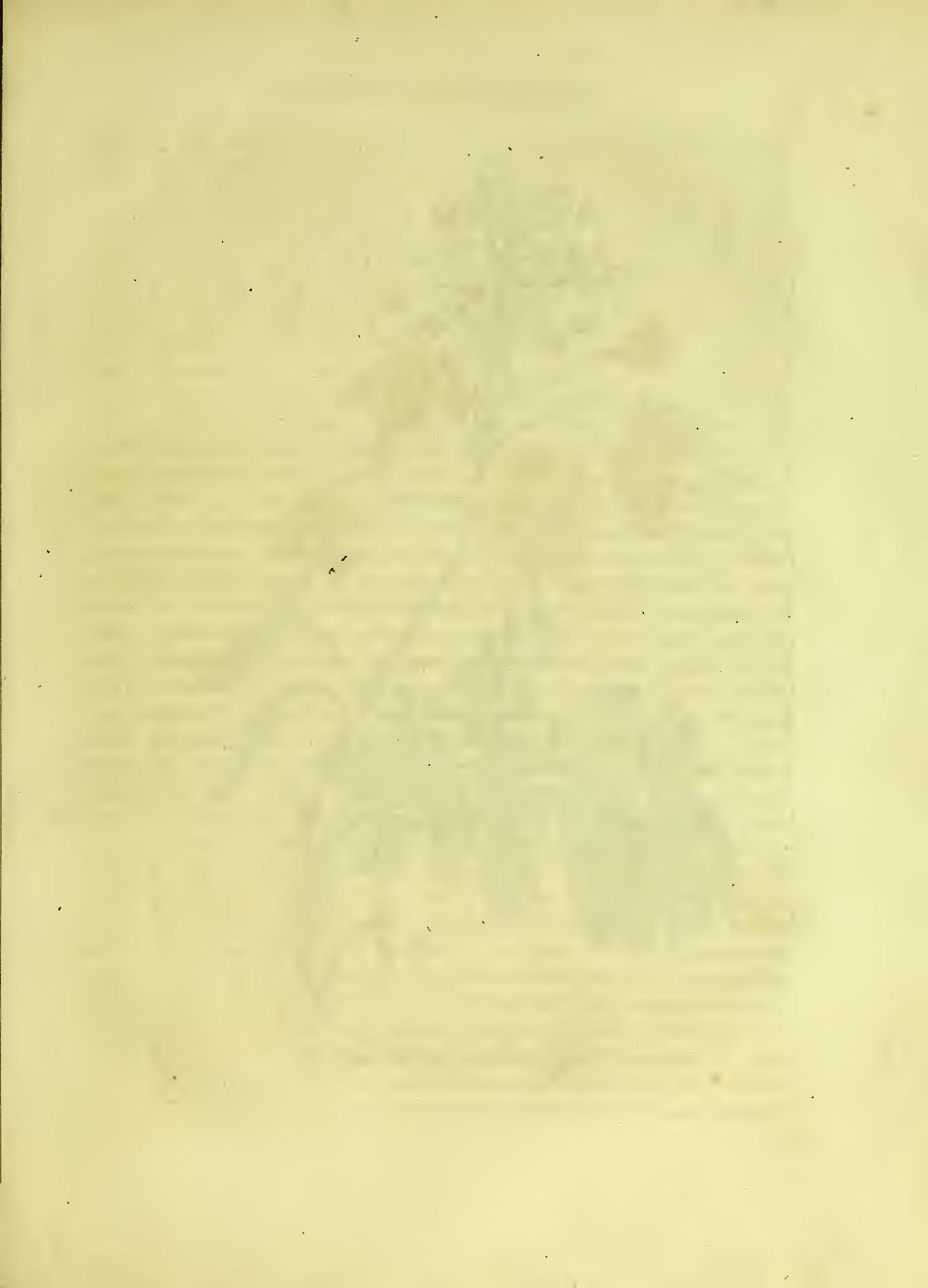
THIS plant grows nine feet in height, and bears most beautiful yellow flowers. The seed steeped in water, and a strong decoction of it given to a woman in labour, greatly facilitates the delivery. For this reason, those Indian slaves who have considered themselves cruelly used by their task-masters in the plantations, take great pains to get at this tree, for the purpose of procuring abortion, which they know it never fails to effect. Those negroes who are brought from Guinea and Angola were the first who were discovered making use of this plant; and while they ate of it, or drank a decoction of its leaves or seeds, they neither conceived nor brought forth children. On being remonstrated with, they said they would sooner die than bring forth children in slavery, who, as they grew up, must undergo the same yoke, and suffer all the cruelties inflicted on their unfortunate parents. Tournefort calls this tree *Poinciana flore pulcherrimo*. It grows in all the warm climates, and is found in many parts of America.

#### PIMENTO, OR JAMAICA PEPPER TREE. MYRTUS.

THE Jamaica pepper-tree is a species of the myrtle, a genus of the monogynia order, belonging to the icosandria class, of plants; and in the natural method ranking under the 19th order, hesperideæ. The calyx is quinquefid, superior; there are five petals; the berry is dispermous or trispermous. There are twenty-eight species, of which the most remarkable are,

1. The *communis*, or common myrtle-tree, riseth with a shrubby, upright, firm, stem, branching numerously all around into a close full head, rising eight or ten feet high, very closely garnished with oval-lanceolate, entire, mostly opposite, leaves, from half an inch to an inch and a half long, and one broad, on short foot-stalks; and numerous, small, pale, flowers from the axillas, singly on each foot-stalk, having diphyllous involucrums; each flower succeeded by a small, oval, dark-purple, berry.

The





*W. W. del.*

*The Flowering Paroni.*

*J. S. S. sculp.*

The most material varieties are:—Broad-leaved Roman myrtle, with oval, shining, green, leaves, an inch and a half long, and one broad; and which is remarkably floriferous. Gold striped broad-leaved Roman myrtle. Broad-leaved Dutch myrtle, with spear-shaped, sharp-pointed, dark-green, leaves, an inch long, and about three quarters of one broad. Double-flowered Dutch myrtle. Broad-leaved Jews myrtle, having the leaves placed by threes at each joint; by which particular circumstance this species is in universal estimation among the Jews in their religious ceremonies, particularly in decorating their tabernacles; and for which purpose many gardeners about London cultivate it with particular care, to sell to the above people, who are often obliged to purchase it at the rate of sixpence or a shilling for a small branch: for the true sort, having the leaves exactly by threes, is very scarce, and is a curiosity; but by care in its propagation, taking only the perfectly ternate-leaved shoots for cuttings, it may be increased fast enough; and is worth the attention of the curious, and particularly those who raise myrtles for the London markets. Orange-leaved Spanish myrtle, with oval spear-shaped leaves, an inch and a half long or more, and one broad, in clusters round the branches, and resemble the shape and colour of orange-tree leaves. Gold-striped leaved orange myrtle. Common upright Italian myrtle, with its branches and leaves growing more erect; the leaves oval, lanceolate-shaped, acute-pointed, and near an inch long, and half a one broad. Silver-striped upright Italian myrtle. White-berried upright Italian myrtle. Portugal acute-leaved myrtle, with spear-shaped, oval, acute-pointed, leaves, about an inch long. Box-leaved myrtle, with weak branches, small, oval, obtuse, lucid-green, closely-placed, leaves. Striped box-leaved myrtle. Rosemary-leaved myrtle, hath erect branches, small, narrow, lanceolate, acute-pointed, shining, green, very fragrant, leaves. Silver-striped rosemary-leaved myrtle. Thyme-leaved myrtle, with very small closely-placed leaves. Nutmeg-myrtle, with erect branches and leaves; the leaves oval, acute-pointed, and finely scented like a nutmeg. Broad-leaved nutmeg-myrtle. Silver-striped leaved ditto. Crisped or cock's-comb myrtle, frequently called bird's-nest myrtle, hath narrow sharp-pointed leaves, crisped at intervals. These are all beautiful ever-green shrubs of exceeding fragrance; exotics originally of the southern parts of Europe, and of Asia and Africa, and consequently in this country require the shelter of a green-house in winter: all of which, though rather of the small-leaved kind, have their foliage closely placed, remain all the year, and are very floriferous in summer; and, when there is a collection of the different sorts, they afford an agreeable source of variety with each other. They therefore claim universal esteem as principal green-house plants, especially as they are all so easily raised from cuttings, and of such easy culture, as to be attainable in every garden where there is any sort of green-house, or

garden-frames furnished with glasses for protecting them in winter from frost; but some of the broad-leaved sorts are so hardy as to succeed in the full ground, against a south wall and other warm exposures, all the year, by only allowing them shelter of mats occasionally in severe frosty weather; so that a few of these sorts may also be exhibited in a warm situation in the shrubbery: observing, however, that all the sorts are principally to be considered as green-house plants, and a due portion of them must always remain in pots to move to that department in winter.

2. The *Myrtus pimenta*, Jamaica pepper, or all-spice tree, grows above thirty feet in height, and two in circumference; the branches near the top are much divided and thickly beset with leaves, which by their continual verdure always give the tree a beautiful appearance; the bark is very smooth externally, and of a grey colour; the leaves vary in shape and in size, but are commonly about four inches long, veined, pointed, elliptical, of a deep shining-green colour; the flowers are produced in bunches or panicles, and stand upon subdividing or trichotomous stalks, which usually terminate the branches; the calyx is cut into four roundish segments; the petals are also four, white, small, reflex, oval, and placed opposite to each other between the segments of the calyx; the filaments are numerous, longer than the petals, spreading, of a greenish-white colour, and rise from the calyx and upper part of the germen; the antheræ are roundish, and of a pale-yellow colour; the style is smooth, simple, and erect; the stigma is obtuse; the germen becomes a round succulent berry, containing two kidney-shaped flattish seeds. This tree (a branch of which is shown on the Plate at fig. 1.) is a native of New Spain and the West-India islands. In Jamaica it grows very plentifully; and in June, July, and August, puts forth its flowers, which, with every part of the tree, breathe an aromatic fragrance. The berries when ripe are of a dark-purple colour, and full of a sweet pulp, which the birds devour greedily, and, muting the seeds, afterwards propagate these trees in all parts of the woods. It is thought that the seeds, passing through them in this manner, undergo some fermentation, which fits them better for vegetating than those gathered immediately from the tree.

The *pimento* is a most beautiful odiferous ever-green, and exhibits a fine variety in the stove at all seasons. It was first introduced and cultivated in this country by Mr. Philip Miller in 1739. With respect to flowering, all the varieties of the *Myrtus communis* flower here in July and August, most of which are very floriferous: the broad-leaved Roman kind in particular is often covered with flowers, which in some of the sorts are succeeded here by berries ripening in winter. The *pimento* also flowers in the stove with great beauty and luxuriance. The flowers of most of the sorts are small, but numerous; and are all formed each of five oval petals and many stamens. As all these plants require protection in this country, they must be

kept always in pots, for moving to the proper places of shelter according to their nature; the *Myrtus communis* and varieties to the green-house in winter; the *pimento* and other delicate kinds to the stove, to remain all the year. Therefore let all the sorts be potted in rich light earth; and, as they advance in growth, shift them into larger pots, managing the myrtles as other green-house shrubs, and the stove-kind as other woody exotics of the stove.

*Properties, &c.* The leaves and flowers of common upright myrtle have an astringent quality, and are used for cleansing the skin, fixing the teeth when loosened by the scurvy, and strengthening the fibres. From the flowers and young tops is drawn a distilled water that is detergent, astringent, cosmetic, and used in gargles. A decoction of the flowers and leaves is applied in fomentations. The berries have a binding detergent quality; and the chemical oil obtained from them is excellent for the hair, and used in pomatum and most other external beautifiers of the face and skin. As an internal medicine, these berries have little or no merit.

In the *Dictionnaire portatif d'Histoire Naturelle*, a fact is related, which, if true, tends to show the strongly-astringent quality of myrtle. "Myrtle is likewise the base of a pomatum called *pommade de la comtesse*, and well known on account of an extraordinary historical fact. One of those gay youths who flutter about the toilets of the fair happened one day to be left alone in the storehouse of the graces. With eager curiosity he examined the perfumes, the smelling-bottles, the perfumed powder, the essences, and the cosmetics. To give more of the vermillion and greater pliancy to his lips, and to remove some disagreeable eruptions, he lightly spreads with his indiscreet finger the fatal pomade, looks at himself in the glafs, and contemplates his beauty with admiration. The lady enters; he wishes to speak, but his lips contracted, and he could only stammer. The lady looked at him with astonishment; at length casting her eyes on the toilet, she discovered by the open pot the cause of the mistake, and enjoyed a hearty laugh at the expense of her admirer, whose confusion announced his indiscretion."

Pimento-berries are chiefly imported into Britain from Jamaica; whence the name *Jamaica pepper*. It is also called *all-spice*, from its taste and flavour being supposed to resemble those of many different spices mixed together. It is one of the staple articles of Jamaica, where the pimento-walks are upon a large scale, some of them covering several acres of ground. When the berries arrive at their full growth, but before they begin to ripen, they are picked from the branches, and exposed to the sun for several days, till they are sufficiently dried; this operation is to be conducted with great care, observing that on the first and second day's exposure they require to be turned very often, and always to be preserved from rain and the evening dews. After this process is completed, which is known by the colour and rattling of the seeds in the berries, they are put up in bags or hogsheads for the market. This spice, which

which was at first brought over for dietetic uses, has been long employed in the shops as a succedaneum to the more costly oriental aromatics: it is moderately warm, of an agreeable flavour, somewhat resembling that of a mixture of cloves, cinnamon, and nutmegs. Distilled with water it yields an elegant essential oil, so ponderous as to sink in the water, in taste moderately pungent, in smell and flavour approaching to oil of cloves, or rather a mixture of cloves and nutmegs. To rectified spirit it imparts by maceration or digestion the whole of its virtue: in distillation it gives over very little to this menstruum, nearly all its active matter remaining concentrated in the inspissated extract. Pimento can scarcely be considered as a medicine: it is, however, an agreeable aromatic, and on this account is not unfrequently employed with different drugs, requiring such a grateful adjunct. Both the Pharmacopœias direct an aqueous and spirituous distillation to be made from these berries, and the Edinburgh College orders also the *oleum essentiale piperis Jamaicensis*.

#### PLANTAIN-TREE. MUSA.

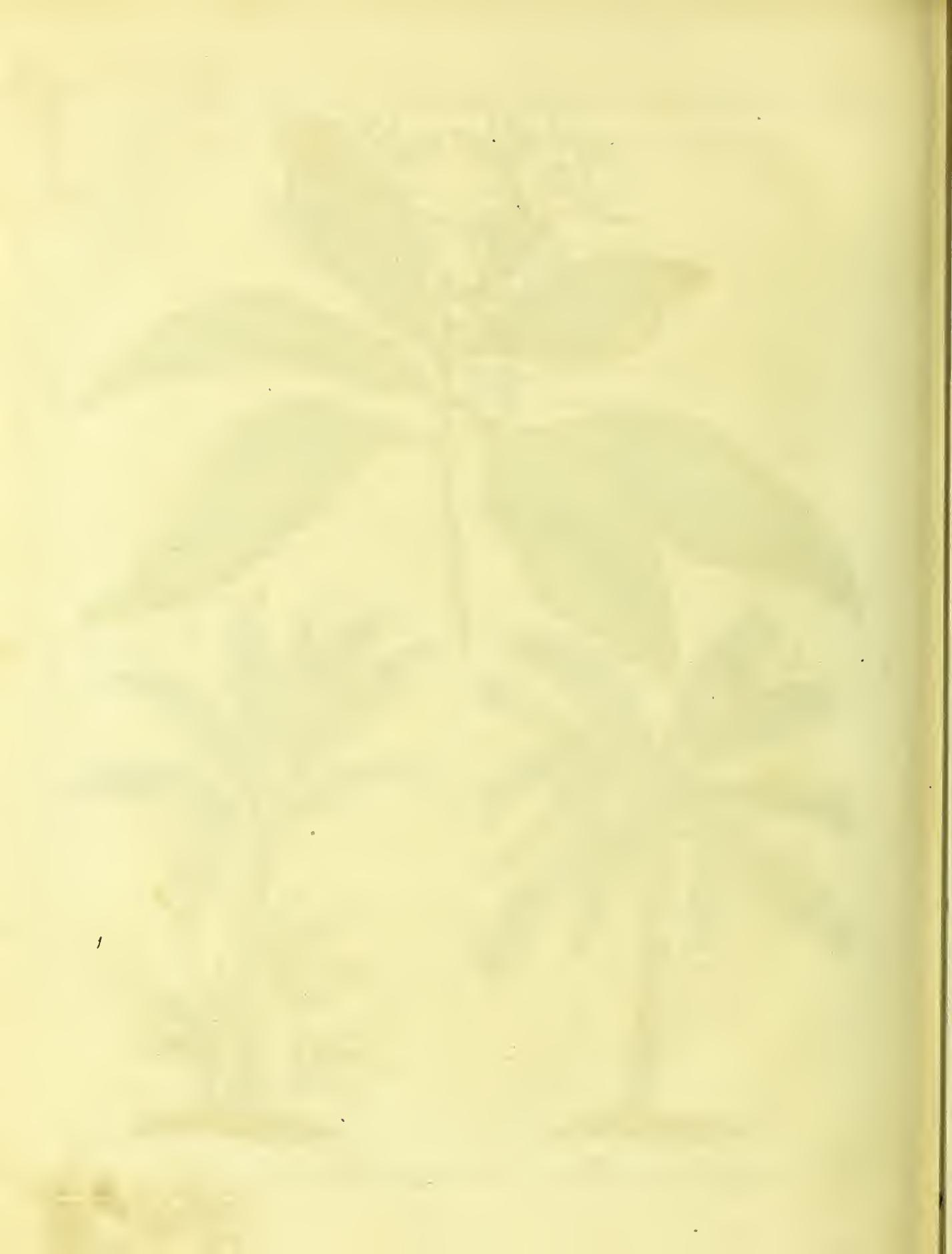
THE plantain-tree is a genus of the monogynia order, belonging to the hexandria clas, of plants; and in the natural method ranking under the eighth order, scitamineæ. The calyx of the male hermaphrodite is a spatha, or sheath; the corolla is dipetalous; the one petal erect and quinquedentate; the other nectariferous, concave, and shorter; there are six filaments; five of which are perfect; one style; the germen inferior and abortive. The female hermaphrodite has the calyx, corolla, filaments, and pistil, of the male-hermaphrodite, with only one filament perfect; the berry is oblong, and three-angled below. The most remarkable species are, the *Musa paradisaica*, or Jamaica plantain; and the *Musa sapientum*, or banana-tree. See the Plate, fig. 2, 3.

The first sort is cultivated in all the islands of the West-Indies, where the fruit serves the Indians for bread; and some of the white people also prefer it to most other things, especially to the yams and cassada-bread. The plant rises with a soft stalk fifteen or twenty feet high; the lower part of the stalk is often as large as a man's thigh, diminishing gradually to the top, where the leaves come out on every side; these are often eight feet long, and from two to three feet broad, with a strong fleshy mid-rib, and a great number of transverse veins running from the mid-rib to the borders. The leaves are thin and tender, so that, where they are exposed to the open air, they are generally torn by the wind; for, as they are large, the wind has great power against them; these leaves come out from the centre of the stalk, and are rolled up at their first appearance; but, when they are advanced above the stalks, they expand and turn backward. As these leaves come up rolled in the manner before-mentioned, their advance upward is so quick, that their growth may almost

be



odd delin. 1 The Pimento, or Jamaica Pepper Tree. 2 The Jamaica Plantain. 3 The Banana Plantain. <sup>ay. Sculp.</sup>



be discerned by the naked eye; and, if a fine line be drawn across, level with the top of the leaf, in an hour's time the leaf will be near an inch above it. When the plant is grown to its full height, the spikes of flowers will appear in the centre, which is often near four feet in length, and nods on one side. The flowers come out in bunches; those in the lower part of the spike being the largest; the others diminish in their size upward. Each of the bunches is covered with a spathe or sheath of a fine purple colour, which drops off when the flowers open. The upper part of the spike is made up of male or barren flowers, which are not succeeded by fruit, but fall off with their covers. The fruit, or plantain, is about a foot long, and an inch and a half or two inches diameter: it is at first green, but when ripe of a pale-yellow colour. The skin is tough; and within is a soft pulp of a luscious sweet flavour. The spikes of the fruit are often so large as to weigh upwards of forty pounds. The fruit of this sort is generally cut before it is ripe. The green skin is pulled off, and the heart is roasted in a clear fire for a few minutes, and frequently turned: it is then scraped, and served up as bread. Boiled plantains are not so palatable. This tree is cultivated on a very extensive scale in Jamaica; without the fruit of which, Dr. Wright says, the island would scarcely be habitable, as no species of provision could supply its place. Even flour or bread itself would be less agreeable, and less able to support the laborious negro, so as to enable him to do his business or to keep in health. Plantains also fatten horses, cattle, swine, dogs, fowls, and other domestic animals. The leaves, being smooth and soft, are employed as dressings after blisters. The water from the soft trunk is astringent, and employed by some to check diarrhoeas. Every other part of the tree is useful in different parts of rural economy. The leaves are used for napkins and table-cloths, and are food for hogs.

The second sort differs from the first, in having its stalks marked with dark purple stripes and spots. The fruit is shorter, straighter, and rounder: the pulp is softer, and of a more luscious taste. It is never eaten green; but, when ripe, it is very agreeable, either eaten raw or fried in slices as fritters; and is relished by all ranks of people in the West-Indies. Both the above plants were carried to the West-Indies from the Canary Islands; whither, it is believed, they had been brought from Guinea, where they grow naturally. They are also cultivated in Egypt, and in most other hot countries, where they grow to perfection in about ten months, from their first planting to the ripening of their fruit. When their stalks are cut down, several suckers come up from the root, which in six or eight months will produce fruit; so that, by cutting down the stalks at different times, there is a constant succession of fruit all the year.

In Europe some of these plants are preserved in the gardens of curious persons, who have hot-houses capacious enough for their reception, in many of which they have ripened their fruit very well; but, as they grow very tall, and their leaves are large, they require more room in the stove than most people care to allow them. They are propagated by suckers, which come from the roots of those plants which have fruited; and many times the younger plants, when they are stinted in growth, will also put out suckers.

The fruit of the banana-tree is four or five inches long, of the size and shape of a middling cucumber, and of a high grateful flavour: the leaves are two yards long, and a foot broad in the middle; they join to the top of the body of the tree, and frequently contain in their cavities a great quantity of water, which runs out, upon a small incision being made into the tree, at the junction of the leaves. Bananas grow in great bunches, that weigh a dozen pounds and upwards. The body of the tree is so porous as not to merit the name of wood; the tree is only perennial by its roots, and dies down to the ground every autumn.

When the natives of the West-Indies (says Labat) undertake a voyage, they make provision of a paste of banana; which, in case of need, serves them for nourishment and drink: for this purpose they take ripe bananas; and, having squeezed them through a fine sieve, form the solid fruit into small loaves, which are dried in the sun or in hot ashes, after being previously wrapped up in the leaves of the Indian flowering-reed. When they would make use of this paste, they dissolve it in water, which is very easily done; and the liquor, thereby rendered thick, has an agreeable acid taste imparted to it, which makes it both refreshing and nourishing. The banana is greatly esteemed, and even venerated, by the natives of Madeira, who term it the forbidden fruit, and reckon it a crime almost inexpiable to cut it with a knife; because, after dissection, it exhibits, as they pretend, a similitude of our Saviour's crucifixion; and to cut the fruit open with a knife, is, in their apprehension, to wound his sacred image.

Some authors have imagined, that the banana-tree was that of the leaves of which our first parents made themselves aprons in Paradise. The sacred text, indeed, calls the leaves employed for that purpose *fig-leaves*; and Milton, in a most beautiful but erroneous description, affirms the bearded- or Bengal fig to have been the tree alluded to. But, besides that the fruit of the banana is often by the most ancient authors called a fig, its leaves, by reason of their great size and solidity, were much more proper for a veil or covering than those of the Bengal fig, which are seldom above six or eight inches long and three broad. On the other hand, the banana-leaves, being four or five feet long, and proportionally broad, were very likely to be pitched upon in preference to all others; especially as they might be ea-

sily joined, or sewed together, with the numerous thread-like filaments that may, with the utmost facility, be peeled from the body of this tree.

Some have supposed the Abyssinian plant *ensete* to be a species of *Musa*. It is said to be a native of the province of Narea, where it grows in the great marshes and swamps for which that province is remarkable, owing to the many rivers which originate in that country, and have but a small declivity to the ocean. This plant, as well as the coffee-tree, is said to have been unknown in Abyssinia before the arrival of the Galla, who imported them both along with them. It comes to great perfection about Gondar; but the principal plantations of it are in that part of Maitsha and Gouth, to the west of the Nile, where it is almost the sole food of the Galla who inhabit that country. Maitsha is almost entirely on a dead level; so that the rains stagnate, and prevent the sowing of grain. Were it not for the *ensete*, therefore, the Galla would have scarcely any vegetable food. Mr. Bruce thinks that the *ensete* may have been cultivated in some of the gardens of Egypt about Rosetta, but that it was not a native of the country. He strongly controverts the opinion that this plant is a species of *Musa*. "It is true (says he), the leaf of the banana resembles that of the *ensete*: it bears figs, and has an excrescence from its trunk, which is terminated by a conical figure, chiefly differing from the *ensete* in size and quantity of parts; but the figs of the banana are of the size and figure of a cucumber, and this is the part which is eaten. This fig is sweet, though mealy, and of a taste highly agreeable. It is supposed to have no seeds, though in fact there are four small black seeds belonging to every fig. But the figs of the *ensete* are not eatable: they are of a soft tender substance, watery; tasteless, and in colour and consistence resembling a rotten apricot: they are of a conical form, crooked a little at the lower end; about an inch and a half in length, and an inch in breadth where thickest. In the inside of these is a large stone half an inch long, of the shape of a bean or cashew-nut, of a dark-brown colour; and this contains a small seed, which is seldom hardened into fruit, but consists only of skin. The long stalk that bears the figs of the *ensete* springs from the centre of the plant, or rather is the body or solid part of the plant itself. Upon this, where it begins to bend, are a parcel of loose leaves; then grows the fig upon the body of the plant without any stalk; after which the top of the stalk is thick set with small leaves, in the midst of which it terminates the flower in the form of an artichoke; whereas in the banana, the flower in form of the artichoke grows at the end of that shoot or stalk which proceeds from the middle of the plant, the upper part of which bears the row of figs. The leaves of the *ensete* are a web of longitudinal fibres closely set together; and they grow from the bottom without stalks: whereas the banana is in form like a tree, and has been mistaken for such. One half of it is divided into a stem, the other is a head formed with

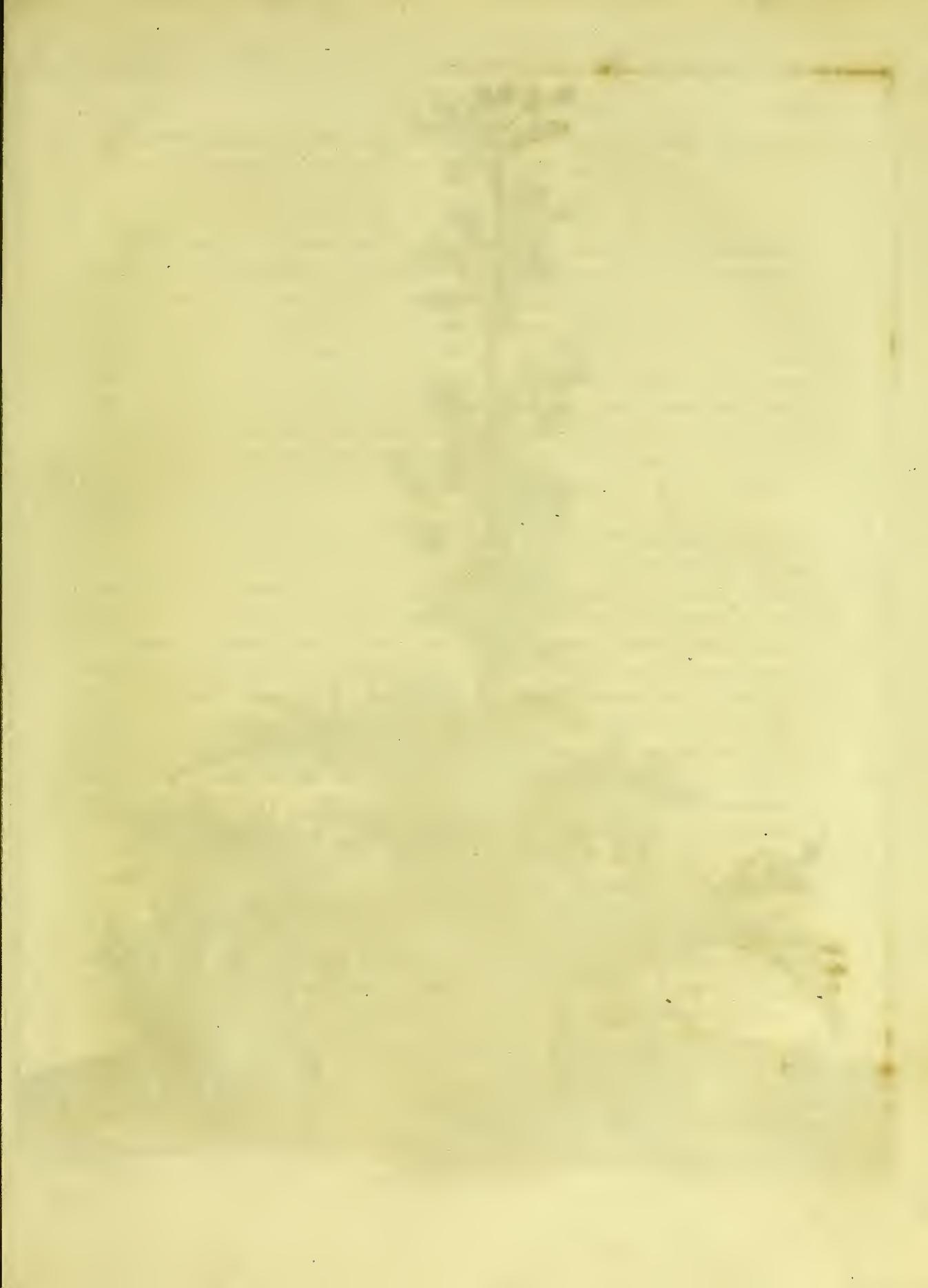
leaves;

leaves; and, in place of the stem that grows out of the ensete, a number of leaves, rolled round together like a truncheon, shoots out of the heart of the banana, and renews the upper as the under leaves fall off: but all the leaves of the banana have a long stalk; this fixes them to the trunk, which they do not embrace by a broad base, or involucrum, as the ensete does.

“ But the greatest differences are still remaining. The banana has by some been mistaken for a tree of the palmaceous kind, for no other reason but a kind of similarity in producing the fruit on an excrecence or stalk growing from the heart of the stem; but still the musa is neither woody nor perennial; it bears the fruit but once; and in all these respects it differs from trees of the palmaceous kind, and indeed from all sorts of trees whatever. The ensete, on the contrary, has no naked stem; no part of it is woody: the body of it, for several feet high, is esculent; but no part of the banana-plant can be eaten. As soon as the stalk appears perfect and full of leaves, the body of the plant turns hard and fibrous, and is no longer fit to be eaten: before, it is the best of all vegetables. When boiled, it has the taste of the best new wheat-bread not perfectly baked. When you make use of the ensete for eating, you cut it immediately above the small detached roots, and perhaps a foot or two higher, as the plant is of age. The green must be stripped from the upper part till it becomes white; when soft, like a turnip well boiled, if eaten with milk or butter, it is the best of all food, wholesome, nourishing, and easily digested.”

Our author now proceeds to consider an hieroglyphic sometimes met with in Egypt, viz. the figure of Isis sitting between some branches of the banana-tree, as is supposed, and some handfuls of ears of wheat. You see likewise the hippopotamus ravaging a quantity of the banana-tree. Yet the banana is merely adventitious in Egypt: it is a native of Syria: it does not even exist in the low hot country of Arabia Felix; but chooses some elevation in the mountains where the air is temperate; and is not found in Syria farther to the southward than lat. 34°.

Upon this account Mr. Bruce thinks, that the banana, not being a plant of the country, “ could never have entered into the list of their hieroglyphics; for this reason, it could not figure any thing regular or permanent in the history of Egypt or its climate. I therefore imagine (adds he) that this hieroglyphic was wholly Ethiopian; and that the supposed banana, which, as an adventitious plant, signified nothing in Egypt, was only a representation of the ensete; and that the record in the hieroglyphic of Isis and the ensete-tree was something that happened between harvest, which was about August, and the time that the ensete-tree came in use, which was in October.—The hippopotamus is generally thought to represent a Nile that has been so abundant as to be destructive. When, therefore, we see upon obelisks the hippopotamus destroying the banana, we may suppose it meant that the extraordinary





nary inundation had gone so far as not only to destroy the wheat, but also to retard or hurt the growth of the ensete, which was to supply its place."

### TURKEY RHUBARB. RHEUM.

RHUBARB is a genus of the class enneandria, order trigynia. Its characters are these: The flower has no empalement; it hath one petal, which is narrow at the base, and impervious; the brim is cut into six parts, which are obtuse, and alternately smaller; it hath nine hair-like stamina inserted in the petal, and of the same length, terminated by oblong summits, which are obtuse; and a short three-cornered germen, with scarcely any style, crowned by three-feathered stigmas, which are reflexed; the germen afterwards becomes a large three-cornered seed, with acute membranaceous borders. Miller reckons four, and Linnæus five, species. The true rhubarb is now sown in many gardens; and may probably succeed so well here in time, as that a sufficient quantity of that valuable drug may be raised to supply our consumption.

The rhubarb with hairy leaves and equal foot-stalks has been generally reckoned the true rhubarb plant, having been produced from the seeds sent from Russia, as those of the true rhubarb, to Jussieu of Paris, Rand at Chelsea, and Linnæus at Upsal. It is a native of China and Siberia, and has been raised in some of our own gardens, where it is found to grow with vigour in the open ground. Some have derived its name from *Rha*, the river called by us Wolga, and *barbarum*; q. d. "the root found by the *barbarians* on the river *Rha*." However it is necessary to observe, that Dr. Hope received, in 1763, rhubarb-seeds from Russia, which Dr. Mounsey assured him were the seeds of the true rhubarb; and, having sown them in the open ground at Edinburgh, they produced a different species, viz. the *Rheum palmatum Linnæi*, with the leaves deeply cut into pointed segments. He observes that the root of this plant, though taken up too young, and at an improper season, viz. in July, agreed perfectly with the best foreign rhubarb in colour, smell, taste, and purgative quality. See his botanical description and drawing of the plant in Phil. Transf. vol. lv. art. 32. Perhaps, says Dr. Lewis, the roots of both species may be of the same quality, and taken promiscuously. The *rhaponticum* is a different species from either of these. Mr. Bell informs us, in his Travels, that the best rhubarb grows in that part of the Eastern Tartary called Mongallia, which serves as a boundary between Russia and China. This plant, he says, does not run and spread itself like docks, but grows in tufts at uncertain distances, as if the seeds had been dropped with design. As the Mongalls do not think it worth cultivating, the marmots, which burrow under the shade of its spreading leaves, and probably feed on its leaves and roots, contribute to its increase, partly by the manure which their dung affords it, and principally by casting up and loosening the earth, into which

the ripe seeds blown by the wind fall, and where they immediately take root. After digging and gathering the rhubarb, the Mongalls cut the large roots into small pieces, in order to make them dry more readily. In the middle of every piece they scoop a hole, through which a cord is drawn, in order to suspend them in a convenient place; and by this practice they destroy some of the best part of the root.

All rhubarb-plants, says Millar, are propagated by seeds, which should be sown in autumn soon after they are ripe, and then the plants will come up the following spring; whereas, if they are sown in the spring, they will not come up till the next spring. The plants should remain where the seeds are sown; and, when they appear in the spring, the ground should be hoed to cut up the weeds, and they should be thinned, like carrots and parsnips, leaving them at the first hoeing six or eight inches asunder, and, at the second hoeing, at the distance of at least a foot and a half. After this the plants will require no other culture but to keep them clean from weeds. In autumn the leaves decay, when the ground should be made clean; and it should also be hoed and cleaned in the spring, when the plants put out their new leaves. In the second year after they come up, the strongest will produce flowers and seeds; and, in the third year, most of them will flower. The roots will remain many years without decaying; and it is said, that the old roots of the true rhubarb are much preferable to the young ones. They delight in a rich soil, not too dry nor too moist, and where there is a good depth for their roots to run down; in such land their leaves will be very large, and their roots will grow to a great size.

Two sorts of rhubarb-roots are met with in the shops. The first is imported from Turkey and Russia, in roundish pieces, freed from the bark, with a hole through the middle of each, externally of a yellow colour, internally variegated with lively reddish streaks. The other, which is less esteemed, comes immediately from the East-Indies in longish pieces, harder, heavier, and more compact, than the foregoing. The first sort, unless kept very dry, is apt to grow mouldy and worm-eaten; the second is less subject to these inconveniences. Some of the more industrious artists are said to fill up the worm-holes with certain mixtures, and to colour the outside of the damaged pieces with powder of the finer sorts of rhubarb, and sometimes with cheaper materials. The marks of the goodness of rhubarb are, the liveliness of its colour when cut; its being firm and solid, but not flinty or hard; its being easily pulverable, and appearing, when powdered, of a fine bright yellow colour; its imparting to the spittle, on being chewed, a deep saffron tinge, and not proving slimy or mucilaginous in the mouth. Its taste is sub-acrid, bitterish, and somewhat styptic; the smell is lightly aromatic.

Rhubarb is a mild cathartic, and commonly considered as one of the safest and most innocent of the substances of this class. Besides its purgative virtue, it has a

mild astringent one, discoverable by the taste, and by its striking an inky blackness with chalybeate solutions; hence it is found to strengthen the tone of the stomach and intestines, to leave the belly costive, and to be one of the most useful purgatives in diarrhoeas, dysenteries, and all disorders proceeding from a debility and laxity of the fibres: it is frequently given with a view to this stomachic and corroborating virtue, rather than to its producing any considerable evacuations. It tinges the urine of a high yellow colour. Rhubarb in substance purges more effectually than any preparation of it: the dose is from a scruple to a dram. By roasting it with a gentle heat, till it becomes easily friable, its cathartic power is diminished, and its astringency supposed to be increased. The purgative virtue of rhubarb is extracted more perfectly by water than by rectified spirit; the root remaining after the action of water is almost if not wholly inactive; whereas, after repeated digestion in spirit, it proves still very considerably purgative: when the rhubarb has given out to spirit all that this menstruum can extract, it still imparts a deep colour, as well as a purgative impregnation, to water. A dram of the extract, formed by inspissating the watery infusion, is not more efficacious than a scruple of the root in substance; but half a dram of the extract formed from the spirituous tincture proves moderately purgative, though scarcely more so than an equal quantity of the powder. The spirituous extract dissolves almost wholly in water; and hence the tincture, like the spirituous infusions of most other vegetables, does not turn milky on being mixed with aqueous liquors; of the watery extract scarcely above one fourth is dissolved by rectified spirit, and the part that does not dissolve proves more purgative than that which does. Hence it appears, that rhubarb contains much more gummy or mucilaginous than resinous matter; and its purgative quality seems to reside chiefly in a combination of gummy and saline matter.

Tinctures of this root are drawn in the shops with proof-spirit and with mountain-wine, in the proportion of an ounce of rhubarb to a pint of the menstruum. These preparations, used chiefly as mildly-laxative corroborants, in weakness of the stomach, indigestion, diarrhoeas, colicky and other such complaints, are commonly aromatised with a little cardamom-seeds and saffron, as two drams of the former and one of the latter to the above quantity of the root, and thus are formed the *tinctura rhei vinosa & spirituosa*. For some purposes, a tincture, called *tinctura rhei dulcis*, is drawn from the rhubarb and cardamom-seeds with proof-spirit, and two ounces of white sugar-candy dissolved in the strained liquor. For others, instead of sweets and aromatics, gentian and snake-root are joined, in the proportion of a dram and a half of the former and a dram of the latter, with the addition of a scruple of cochineal as a colouring ingredient; this last tincture, called *tinctura rhei*

*rhei amara*, is, in many cases, an useful assistant to the Peruvian bark in the cure of intermittents.

The Turkey rhubarb is generally preferred to the East-India sort, though the latter is more astringent, but has something less of an aromatic flavour. Tinctures made from both, with equal quantities of rectified spirit, have nearly the same taste: on drawing off the menstrua, the extract left by the tincture of the East-India rhubarb proves in taste considerably stronger than the other. They seem both, says Dr. Lewis, to be the produce of the same climate, and roots of the same species of plant, taken up probably at different seasons, or cured in a different manner.

The yellow colour of rhubarb, it is said, is much less destructible than many other vegetable yellows. *Aqua-fortis*, and other acids which destroy the colour of saffron, turmeric, &c. make no change in that of rhubarb, or at most render it only turbid. Volatile spirits heighten the colour, and incline to red. Fixed alkaline salts have this effect in a greater degree. Mr. Model affirms that a considerable quantity of selenites is contained in rhubarb. In one experiment he obtained six ounces of selenites from four pounds of rhubarb; and, in the other, no less than an ounce of selenites from two ounces and five drams of old rhubarb.

The Indian rhubarb sown in our gardens has this peculiar property, that it yields a fine and clear gum. This is perfectly white and pellucid; and in the months of June and July is so plentiful, that an ounce may sometimes be gathered at a time from one plant of it. It exsudates of itself from all parts of the stalks and ribs of the leaves, and sometimes from the under part of the leaves themselves. It stands in some places in large drops, and in others the stalks, &c. seem only to be covered with a thin layer of it; and the under part of the leaves in some have it in form of twisted wires or long icicles. The plant may always be seen wounded by a sort of caustic in the places where the germen makes its way out, and these may be followed with any pointed instrument through the skin; in some parts of the plant this juice is found to be turned gummy within it, and looks like clear ice. As this is the only known herbaceous plant that yields a true gum like that of trees, it would be worthy observation, whether some of our own plants may not have some tendency of nature to form a juice of the same kind. It would be most proper to look for this in the plants of the same genus, and as nearly related to the rhubarb as we can. The docks, so common about our fields, are of the same genus; and the forrel shows by its taste, that it is particularly allied to the plant; for both are alike of the dock-kind, and both alike sour. It would be proper to look carefully about the leaves of forrel a little before it flowers, to see whether any thing like the same gum appears on it.

There





The Indian Bean.

W. John

J. Rylands

There is yet this farther analogy between this rhubarb and our common forrel : that the husks of our forrel, boiled in water, with a little alum, turn it to a fine red colour, and the husks of rhubarb do the same ; and both the one and the other often turn red in decaying.

The juice of the roots of this rhubarb, extracted by bruising and steeping it in common water, when the liquor is strained and evaporated, becomes only a clear uninflammable gum, and melts in the flame of a candle. This gum, as well as that of the stalks and leaves, is of an insipid taste; and it is observable, that, though the plant naturally yields it in so large a quantity, yet it will not flow from wounds made by art in any part of the plant. Upon the consideration of the insipid taste of this gum, and its solubility in water, we may find some probable conjecture in regard to the different virtues of this plant in purging and binding.

The woody fibres have a strong taste; and, in all probability, are alone endued with the astringent quality. An infusion of rhubarb is known to purge, and a powder of it to bind: the reason is easily seen on this consideration. The water in infusion takes up all this gummy juice, and its other juices, but leaves the fibrose part behind, in consequence of which it ought to purge without binding; but, in case of giving the powder, the juices are in great part evaporated in the drying, and the woody part left almost alone ; it therefore purges but little, and proves powerfully astringent.

#### INDIAN ROCU. MITELLA.

THE rocu is a tree of considerable stature, bearing flowers of a pale red, like the European apple-blossoms. When the flowers fall off, a head of seed follows, of an oblong roundish form, and prickly, like a chesnut. This contains that beautiful red seed, which the Indians break or macerate, and, putting it in water, it sinks to the bottom, converting the fluid into a most elegant transparent red tincture. This tincture they pour off at their leisure, and the sediment which the seeds form at the bottom they suffer to dry in little cakes, with which they paint their naked bodies in various figures, which they esteem a very great ornament.

This tree is the *urucu* of Piso ; and Tournefort, having joined it with the two species of *Cortusa Americana*, calls it *Mitella*; for the fruit of this, as well as the *Cortusa Americana*, bursts open and represents the shape of an episcopal mitre ; and therefore he entitles it, in his *Institut. Rei Herb.* the *Mitella Americana, maxima tinctoria.*

## SPEEDWELL. VERONICA.

THE flower of speedwell has a permanent empalement, cut into five acute segments, and one tubulous petal the length of the empalement; the brim is cut into four oval plain segments which spread open, and two stamina which are terminated by oblong summits; it has a compressed germen, supporting a slender declining style, crowned by a single stigma; the germen becomes a compressed heart-shaped capsule, with two cells filled with roundish seeds.

The common male speedwell is also called Paul's betony; brook-lime is also a species of the speedwell. Some authors make thirty-five species.

This herb is in great esteem among the Germans in disorders of the breast, both catarrhous and ulcerous, and for purifying the blood and humours. Infusions of the leaves, which are not unpalatable, are drunk as tea, and are found to operate sensibly by urine. It is frequently used as an ingredient in antiscorbutic and deobstruent compositions.

## STARRY ANISEED. ILLICIUM.

WE meet with an account of the starry aniseed, together with a figure of it, taken from Clusius, in Parkinson's Theatre of Plants, p. 1569. where he observes, that some branches of it, with the husks and seeds only, without leaves or blossoms, were brought into England by Sir Thomas Cavendish, in Queen Elizabeth's time, from the Philippine Islands, where he met with it in his voyage round the world. These branches were given to Mr. Morgan, the queen's apothecary, and to Mr. James Garrat, of whom Clusius received them.

Monfieur Geoffroy, in his Materia Medica, translated in 1736 by Dr. G. Douglass, p. 322, calls it *Anisum Sinense, semen badian, & fructus stellatus*, and says it is highly esteemed in China, and all over the east; that it is used to cure any bad taste in the mouth, as a preservative against the effects of bad air, and also for the stone and gravel; and that the Indians likewise steep this fruit in water, and afterwards ferment the infusion, and thus make a vinous liquor; that the Dutch in the East-Indies, as well as the natives, mix this fruit with their tea and sherbet.

Kæmpfer in his Amœnitates Exoticæ, p. 880, calls it *somo*, or *skimmi*; and has given us a very good figure of a branch of it, with the leaves, flowers, and fruit. He found it in Japan; and says that the Japanese and Chinese esteem it a sacred tree; that they offer it to their idols, and burn the bark of it, as a perfume, on their altars; and lay the branches upon the graves of the dead, as an offering to the ghosts of their pious departed friends; and that the public watchmen use the powder of this aromatic bark strewed in small winding grooves or little channels, on





Some ashes in a box secured from the weather, for the following purpose: This powder, being lighted at one end, burns slowly on; and, being come to certain marked distances, and so sparkling through the grooves, they strike a bell, and by means of this time-keeper proclaim the hours of the night to the public. And lastly, that it has the remarkable property of rendering the poison of the bladder-fish (*Tetronodon hispidus*, Linn. Syst. Nat.) more virulent, as many have experienced, that have used violent means to destroy themselves.

We are indebted for the first discovery of this curious American tree to a negro servant of William Clifton, Esq. chief justice of West Florida, who was sent to collect specimens of all the rarer plants by his master, in April 1765. After this, in the latter end of January, 1766, Mr. John Bartram, the king's botanist for the Floridas, discovered it on the banks of the river St. John, in East Florida, as appears from his description of it, and the drawing of a seed-vessel, with some of the leaves, which he sent to Peter Collinson, Esq. Mr. Bartram's description of it is as follows: "Near here my son found a lovely sweet tree, with leaves like the sweet bay, which smelted like sassafras, and produced a very strange kind of seed-pod; but all the seed was shed, the severe frost had not hurt it: some of them grew near twenty feet high, a charming bright ever-green aromatic."

This observation of Mr. Bartram, relating to its bearing a severe frost, may afford a useful hint in the cultivation of this tree, especially as I am convinced, from repeated accounts of the weather in West Florida, that the frost is much more intense there, from whence those plants were brought, than in East Florida; so that the experiment is well worth making with one of them, to see how far it will stand the severity of our winters. Should it succeed, it would be a very great acquisition to our gardeners, and be highly ornamental to our plantations of ever-greens.

The medicinal properties of this tree are certainly worth enquiring into. The leaves afford a most agreeable bitter. A sprig of it set to putrify in a phial of water, the bark soon became full of a clear mucilage. The young blossoms, put into water with a small quantity of tartar *per deliquium*, from a dark-reddish colour became a light-brown; but, from the same proportion of oil of vitriol in water, they turned to a fine carmine colour, which stained the paper of a fine red. This points out its astringent quality.

Many persons think this plant not really a different species from the oriental one. The seed-vessels from China, however, which are to be seen in collections of the *Materia Medica*, especially among foreigners, smell very disagreeably of aniseed: whereas the seed-vessel of the *Floridanum* is agreeably aromatic, as are the leaves and young branches. The flower, according to Kämpfer, is of a yellowish white, and looks at a distance like a narcissus: the present species has a

flower

flower of a dark-red colour. Kæmpfer reckons the number of petals sixteen, and the rays or seed-vessels eight: the number of petals in ours is from twenty-one to twenty-seven, and the seed-vessel twelve or thirteen that ripen. In respect to the form and growth of the tree, they are much the same; for instance, they both grow to the size of a cherry-tree; their leaves are of an oblong oval shape, pointed at both ends, fleshy, with few veins, growing alternately, and in tufts, at the ends of the small branches.

Linnæus, who takes his characters of the *Illicium anisatum* from Kæmpfer, places it among the dodecandria polygynia. But I am persuaded, that, from the following characters, this must be of the polyandria polygynia, and should stand next to the Magnolia.

*Characters of the Illicium Floridanum, or Florida Starry Aniseed Tree.*

**CALYX.** The perianthium, or flower-cup, consists commonly of five little membranous and coloured leaves, that soon fall off; they are of a concave, oblong, oval, form, pointed at the ends. Sometimes we meet with only four little leaves, sometimes six, in the flower-cup. Kæmpfer observed four in his.

**COROLLA.** The flower consists of many petals (from twenty-one to twenty-seven), which are lanceolated: these are of three sizes, and equal numbers in each circle, the outward ones are long, (about an inch,) concave, obtuse, and spreading open. The next are a little shorter and narrower; and the innermost are still shorter, much narrower, and very sharp-pointed: but are not nectaria, as Linnæus supposes.

**STAMINA.** The filaments are many, (about thirty,) very short and flat, placed over one another, surrounding the germina, or embryo seed-vessels. These support as many antheræ, or summits, which are erect, oblong, and emarginated, or having a small indenture at top, with a cell on each side full of farina, of a globular form when they are magnified.

**PISTILLUM**, or female organ. The germina, or embryo seed-vessels, are twenty or more in number, placed in a circular order above the receptacle of the flower: they are compressed, erect, and ending in so many sharp-pointed, styles, bending outwards at the top. The stigmata, or openings on the top of the styles, are downy, and placed lengthways along the upper part of each style.

**PERICARPIUM**, or seed-vessel, consists of twelve, oftener thirteen, little pods, or capsules, that ripen. These are of a compressed oval shape, and a hard leather-like substance, with two valves to each, and are disposed edgeways in a circular order, like so many rays of a star.

**SEMINA.** The seeds are smooth and shining, of an oval shape, a little compressed, and appear obliquely cut off at the base. There is one seed in each capsule.

## SUGAR MAPLE TREE. ACER.

*An Account of the Sugar Maple Tree of the United States, and of the Methods of obtaining Sugar from it, together with Observations upon the Advantages, both public and private, of this Sugar: in a Letter to Thomas Jefferson, Esq. Secretary (afterwards President) of the United States, and one of the Vice-Presidents of the American Philosophical Society; by Benjamin Rush, Professor of the Institutes, and of Clinical Medicine in the University of Philadelphia.*

THE subject of this excellent paper seems at first sight more particularly to relate to the United States; but it may, and we hope will, very essentially affect the general state of the world, by increasing the supply of an article, of which the uses are yet, on account of its high price, but imperfectly known. If the monopoly of the West-India islands, where alone the wasteful culture by slaves, in the absence of the owner, can be supported, should be gradually diminished, and at last abolished, by a plentiful produce of sugar from the maple, humanity would no longer suffer, the article would find its true level, and every nation would be more or less benefited.

The *Acer saccharinum* of Linnæus, or sugar maple tree, grows in great quantities in the western countries of all the middle states of the American union. It is as tall as the oak, and from two to three feet in diameter; puts forth a white blossom in the spring, before any appearance of leaves: its small branches afford sustenance for cattle, and its ashes afford a large quantity of excellent pot-ash. Twenty years are required for it to attain its full growth. Tapping does not injure it; but, on the contrary, it affords more syrup and of a better quality, the oftener it is tapped. A single tree has not only survived, but flourished, after tapping, for forty years. Five or six pounds of sugar are usually afforded by the sap of one tree—though there are instances of the quantity exceeding twenty pounds. The sugar is separated from the sap either by freezing, by spontaneous evaporation, or by boiling. The latter method is the most used. Dr. Rush describes the process, which is simple, and practised without any difficulty by the farmers.

From frequent trials of this sugar, it does not appear to be in any respect inferior to that of the West-Indies. It is prepared at a time of the year when neither insects nor the pollen of plants exist to vitiate it, as is the case with common sugar. From calculations grounded on existing facts, it is ascertained, that America is now capable of producing one eighth more than its own consumption; that is, on the whole, about 135,000,000 pounds, which in the country may be valued at fifteen pounds weight for one dollar. Dr. Rush mentions many other benefits his country may derive from this invaluable tree; and concludes his paper with an account of some of the advantages of sugar to mankind, not merely as commonly considered to be a luxury, but as an excellent, wholesome, and nourishing, article of food.

## TEA-TREE. THEA.

THE tea-tree, *thea* in botany, is the name of a genus of the class polyan-dria, order monogynia, the characters of which are these: The cup is a very small, plane, permanent, perianthium, divided into five or six roundish, obtuse, leaves; the flower consists of six or nine large, roundish, concave, and equal, petals; the stamens are numerous filaments, about two hundred, and are very slender, capillary, and shorter than the flower; the antheræ are simple; the germen of the pistil is globose and trigonal; the style is subulated, and of the length of the stamens; the stigma is simple; the fruit is a capsule, formed of three globular bodies growing together; it contains three cells, and opens into three parts at the top. The seeds are single, globose, and internally angulated.

From an original drawing taken of the tree when in its flowering state, it appears, that the tea-tree, as Mr. Miller first observed, belongs to the order of trigynia; and Linnæus was led to the mistake of placing it in that of monogynia, by not having had any opportunity of examining any other than dried specimens of this shrub. Of this genus Linnæus enumerates two species: viz. the Bohea Tea, having flowers with six petals; and the Green Tea, having flowers with nine petals.

Dr. Lettsom, in his botanical description of the tea-plant, thinks it most probable that there is only one species, and that the difference between the green and bohea teas depends on the nature of the soil, culture, age, and the manner of drying the leaves. He adds, that it has even been observed, that a green-tea tree, planted in the bohea country, will produce bohea, and on the contrary; and that on his examining several hundred flowers, brought both from the bohea and green tea countries, their botanical characters have always appeared uniform.

We are principally indebted to Kämpfer, Le Compte, and Du Halde, for an authentic history of the culture of this exotic shrub, and the manner of preparing or curing its leaves. The particulars of greatest importance that have been recited have been judiciously collected, and the subject farther illustrated with additional observations, by Dr. Lettsom.

The tea-tree thrives best in valleys at the foot of mountains, and upon the banks of rivers, where it enjoys a southern exposure to the sun; though it endures considerable variations of heat and cold, as it flourishes in the northern clime of Pekin, as well as about Canton; and it is observed that the degree of cold at Pekin is as severe in winter as in some of the northern parts of Europe. However, the best tea grows in a mild temperate climate, the country about Nankin producing better tea than either Pekin or Canton, betwixt which places it is situated.

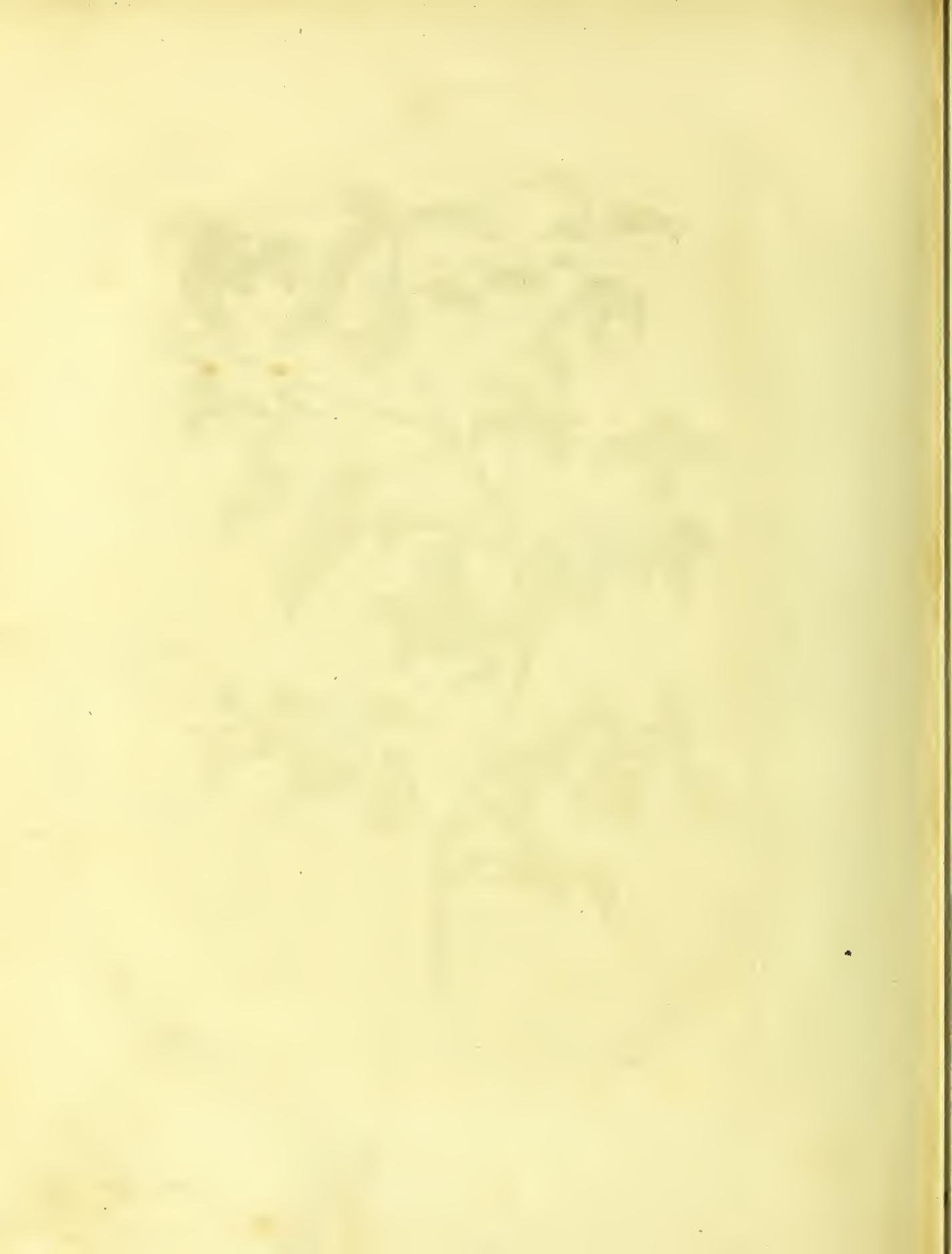
The



*The Tea Tree.*

*Ogilby. delin.*

*Bartow. sculp.*



The root resembles that of the peach-tree; the leaves are green, longish at the point, and pretty narrow, an inch and a half long, and jagged all round. The flower is much like that of the wild rose, but smaller. The fruit is of different forms, sometimes round, sometimes long, sometimes triangular, and of the ordinary size of a bean, containing two or three seeds, of a mouse-colour, including each a kernel. These are the seeds by which the plant propagated: a number from six to twelye or fifteen being promiscuously put into one hole, four or five inches deep, at certain distances from each other. The seeds vegetate without any other care, though the more industrious annually remove the weeds and manure the land. The leaves which succeed are not fit to be plucked before the third year's growth, at which period they are plentiful, and in their prime.

In about seven years the shrub rises to a man's height; and, as it then bears few leaves, and grows slowly, it is cut down to the stem, which occasions an exuberance of fresh shoots and leaves the succeeding summer; some, indeed, defer cutting them till they are of ten years growth. In Japan, the tea-tree is cultivated round the borders of the fields, without regard to the soil; but, as the Chinese export considerable quantities of tea, they plant whole fields with it.

The best time to gather the leaves of tea, is while they are yet small, young, and juicy; and the different periods in which they are gathered are particularly described by Kæmpfer. They are plucked carefully one by one; and, notwithstanding the seeming tediousness of this operation, the labourers are able to gather from four to ten or fifteen pounds each in one day. The tea-trees that yield often the finest leaves grow on the steep declivities of hills, where it is dangerous, and in some cases impracticable, to collect them. The Chinese are said to vanquish this difficulty by a singular contrivance: the large monkeys which inhabit these cliffs are irritated, and in revenge they break off the branches, and throw them down, so that the leaves are thus obtained.

The buildings, or drying-houses, that are erected for curing tea, contain from five to ten or twenty small furnaces, about three feet high, each having at the top a large flat iron pan. There is also a long low table covered with mats, on which the leaves are laid, and rolled by workmen, who sit round it. The iron pan being heated to a certain degree by a little fire made in the furnace underneath, a few pounds of the fresh-gathered leaves are put upon the pan; the fresh and juicy leaves crack when they touch the pan, and it is the busines of the operator to shift them as quick as possible with his bare hands, till they become too hot to be easily endured. At this instant he takes off the leaves with a kind of shovel resembling a fan, and pours them on the mats before the rollers, who, taking small quantities at a time, roll them in the palms of their hands in one direction, while others are fanning them,

that they may cool the more speedily, and retain their curl the longer. This process is repeated two or three times, or oftener, before the tea is put into the stores, in order that all the moisture of the leaves may be thoroughly dissipated, and their curl more completely preserved. On every repetition the pan is less heated, and the operation performed more slowly and cautiously. The tea is then separated into the different kinds, and deposited in the store for domestic use or exportation.

The Chinese know nothing of imperial tea, flower of tea, and many other names, which in Europe serve to distinguish the goodness and the price of this fashionable commodity; but, besides the common tea, they distinguish two other kinds, viz. the *vouï* and *soumlo*, which are reserved for people of the first quality, and those who are sick. We have two principal kinds of tea in Europe: viz.

Green tea, which is the common tea of the Chinese, &c. F. le Compte calls it *bing-tea*, and says it is gathered from the plant in April. It is held very digestive and a little astringent; it gives a palish-green tincture to water, and its leaves are much twisted. The second is,

Bohea tea, which is the *vouï-tea*, *bou-tcha*, of the Chinese. F. le Compte makes this only differ from the green tea by its being gathered a month before it, viz. in March, while in the bud; and hence the smallness of the leaves, as well as the depth of the tincture it gives to the water. Others take it for the tea of some particular province; the soil being found to make an alteration in the properties of the tea, as much as the season of gathering it. It is all bought at Nankin, and thence brought into Europe.

As to the differences in colour and flavour peculiar to these two kinds, and to their varieties, Dr. Lettsom thinks that there is reason to suspect that they are, in some measure, adventitious, or produced by art. He has been informed by intelligent persons, who have resided some time at Canton, that the tea about that city affords very little smell while growing. The same is observed of the tea-plants now in England, and also of the dried specimens from China. We are not, however, as he observes, to conclude from hence, that art alone conveys to teas, when cured, the smell peculiar to each kind; for our vegetable grafts, for instance, have little or no smell till they are dried and made into hay.

As to the opinion that the green tea owes its verdure to an efflorescence acquired from the plates of copper on which it is supposed to be cured or dried, he shows that there is no foundation for this suspicion. The infusions of the finest imperial and bloom teas undergo no change on the affusion of a volatile alkali, which would detect the minutest portion of copper contained in them, by turning the liquors blue. The fine green colour of these teas, with as little reason, hath been attributed to green copperas; as this metallic salt would, on its being dissolved in water, immediately

ately act on the astringent matter of the leaves, and convert the infusion into ink, as happens when a chalybeate water has been employed in the making of tea.

On the whole Dr. Lettsom thinks it not improbable, that some green dye, prepared from vegetable substances, is employed in the colouring of the leaves of the green teas. And Neumann suspects, that the brown colour and the flavour of the bohea sorts are introduced by art. Both the green and bohea teas have an agreeable smell, and a slightly-bitterish subastringent taste; with solution of chalybeate vitriol, they strike an inky blackness. They give out their smell and taste both to watery and spirituous menstrua; to water, the green sorts communicate their own green tincture, and the bohea their brown; but to a rectified spirit they both impart a fine deep green. The extracts, obtained by gently drawing off the menstrua from the filtered tinctures, are very considerably astringent, and not a little ungrateful; but the spirituous most so.

Savary also speaks of a sort of red tea, or Tartar tea, called *homan tcha*, which tinges the water of a pale red, and which is said to be extremely digestive; by means hereof it is that the Tartars are said to be able to feed on raw flesh. Its taste is earthy, and much the least agreeable of them all; but this is scarcely known in England.

Tea is to be chosen of the briskest smell, and as whole as possible; and the greatest care is to be taken that it have not been exposed to the air to pall and evaporate.

The drink, tea, is made in China, and throughout the greatest part of the east, after the same manner as in Europe; viz. by infusing the leaves in boiling water, and drinking the infusion hot. Indeed, among us, it is usual to temper its bitterness with sugar, but the Orientals use it without the addition of sugar or milk. However, the Japanese are said to prepare their liquor a somewhat different way, viz. by pulverizing the leaves, stirring the powder in hot water, and drinking it as we do coffee. From the account given by Du Halde, this method is not peculiar to the Japanese, but is also used in some provinces of China.

The common people, who have a coarser tea, boil it for some time in water, and make use of the liquor for common drink. Early in the morning, the kettle, filled with water, is regularly hung over the fire for this purpose, and the tea is either put into the kettle enclosed in a bag, or by means of a basket of proper size pressed to the bottom of the vessel, that there may be no hindrance in drawing off the water. The Bantsjaa tea only is used in this manner, whose virtues, being more fixed, would not be so fully extracted by infusion.

The Chinese are always taking tea, especially at meals: it is the chief treat where-with they regale their friends. The most moderate take it at least thrice a-day;

others ten times, or more; and yet it is computed the consumption of tea among the English and Dutch is as great in proportion as among the Orientals.

With regard to the commercial history of tea, we may observe that it was first introduced into Europe by the Dutch East-India company, very early in the last century, and that a quantity of it was brought over from Holland by Lord Arlington and Lord Offory about the year 1666, at which time it was sold for sixty shillings a-pound. But it appears, that before this time, drinking of tea, even in public coffee-houses in this country, was not uncommon; for, in 1660, a duty of fourpence per gallon was laid on the liquor made and sold in all coffee-houses.

The present consumption of it is immense. In 1785 it was computed that the whole quantity of tea imported into Europe was about nineteen millions of pounds, of which it is conjectured that twelve millions were consumed in Great Britain and its dependencies. Sir George Staunton informs us, that the annual public sales of teas, by our East-India Company, did not, in the beginning of the eighteenth century, much exceed fifty thousand pounds weight, independently of what little might be then perhaps clandestinely imported. The company's annual sales now approach to thirty millions of pounds; being an increase of six hundred fold in less than one hundred years, and answers to the rate of more than a pound each, in the course of the year, for the individuals of all ranks, sexes, and ages, throughout the British dominions in Europe and America. Taking an average of seven years before the commutation-act, which took effect in September 1784, the importation of teas was 17,662,115lb. and, taking an average of the same number of years from 1784 inclusive, it amounted to 30,691,971lb. The importation is now about 40,000,000lb. of which ten millions are exported.

As to the properties of tea, they are strangely controverted; the eastern nations are at least as much possessed with an idea of their extraordinary virtues as the Europeans; but it is, perhaps, because imagination bears as great a sway there as here. The reason why the gout and stone are unknown in China, is ascribed to the use of this plant.

Tea is extolled as the greatest of all medicines. Moderately and properly taken, it acts as a gentle astringent and corroborative; it strengthens the stomach and bowels, and is good against nausseas, indigestions, and diarrhoeas. It acts also as a diuretic and diaphoretic. The immoderate use of it, however, has been very prejudicial to many, who have been thereby thrown into the diabetes. And thus the infusions of tea-leaves have been extravagantly condemned by some, and commended by others. From the contradictory opinions even of medical writers on this subject, the natural inference seems to be, that they possess neither noxious nor beneficial powers in any very considerable degree. They seem, when moderately

moderately used, to be for the most part innocent; in some cases they seem to be salutary; in some they are apparently prejudicial. They dilute thick juices, and quench thirst more effectually, and pass off by the natural emunctories more freely, than more watery fluids; they refresh the spirits in heaviness and sleepiness, and seem to counteract the operation of inebriating liquors.

From their manifest astringency they have been supposed to strengthen and brace up the solids; but this effect experience does not countenance, as it is in disorders and in constitutions wherein corroborants are most serviceable that the immoderate use of tea is peculiarly hurtful; as in cold indolent habits, cachexies, chlorosis, dropsies, and debilities of the nervous system.

Dr. Lettsom has particularly enquired into the medical qualities and effects of tea; and, having observed that infusions of bohea and green tea contribute to preserve sweet some small pieces of beef immersed in them, he infers that they possess an antiseptic power, when applied to the dead animal fibre; and from their striking a purple colour with salt of iron he deduces their astringent quality. From other experiments he concludes, that the activity of tea chiefly resides in its fragrant and volatile parts; and that, if the use of it be beneficial or injurious to any particular constitution, it becomes so principally by means of this odorous fragrant principle. He apprehends that it is the safest course to use the infusion of the more ordinary kinds of this plant, which abound less with this fragrant principle. Or the tea may be boiled a few minutes in order to dissipate this volatile part, which stands charged as the cause of those nervous affections that are said to be produced, or aggravated, by the use of this liquor. By this process may likewise be extracted more copiously the more fixed, bitter, and stomachic, parts of this vegetable. Dr. Lettsom, who seems to be thoroughly persuaded of the occasionally-noxious effects of this volatile principle, in the finer teas especially, recommends this last-mentioned mode of making tea, or the substitution of the extract instead of the leaves; by the use of which, the nervous relaxing effects, which follow the drinking of tea in the usual manner, would be in great measure avoided. This extract has been imported hither from China, in the form of small cakes, not exceeding a quarter of an ounce each in weight, ten grains of which might suffice one person for breakfast: but it might easily be made here by simple decoction and evaporation, by those who experience the noxious qualities of the volatile principles of this plant.

It may be farther observed, that the effect of drinking large quantities of any warm aqueous liquor would be to enter speedily into the course of circulation, and pass off as speedily by urine or perspiration, or the increase of some of the secretions. Its effects on the solid parts of the constitution would be relaxing, and thereby enfeebling. If this warm aqueous fluid were taken in considerable quantities,

ties, its effects would be proportionable; and still greater, if it were substituted instead of nutriment. The infusion of tea, however, has these two peculiarities. It is not only possessed of a sedative quality, but also of a considerable astringency; by which the relaxing power, ascribed to a mere aqueous fluid, is in some measure corrected on this account. It is, perhaps, less injurious than many other infusions of herbs, which, besides a very slight aromatic flavour, have very little, if any, stypticity, to prevent their relaxing debilitating effects.

So far, therefore, tea, if not too fine, if not drunk too hot, nor in too great quantities, is perhaps preferable to any other known vegetable infusion. And if we take into consideration, likewise, its known enlivening energy, our attachment to it will appear to be owing to its superiority in taste and effects to most other vegetables.

Tea may be considered as a very powerful aphrodisiac; and accordingly a physician of considerable eminence in his profession, imputes the amazing population of China, amongst other causes, to the general use of it.

*Various Acts of Parliament on the Subject of Tea.*—No tea is allowed to be imported, except from the place of its growth, on pain of forfeiture, 11 Geo. cap. 30. and by 24 Geo. III. cap. 38. all the duties upon tea imported, sold, or used, in this kingdom shall cease from September 15, 1784, at which period the East-India company is discharged from the payment of duties on tea in their warehouses; and afterwards there shall be paid a duty of 12l. 10s. per cent. computed upon the gross prices, for all tea delivered by the company to the purchasers, which duty shall be drawn back on exportation to any place where the drawback is already allowed. The company is required to make four sales in the year, and to sell such quantity as shall be sufficient to supply the demand, provided an advance of 1d. per lb. be bid upon the prices at which the teas shall be put up; and, at the four first sales after passing the act, these prices shall not exceed the following rates, viz. for bohea tea 1s. 7d. per lb. for congo tea 2s. 5d. per lb. for couchong tea 3s. 3d. per lb. for singlo tea 3s. 3d. per lb. and for hyson tea 4s. 11d. per lb. and afterwards the whole price at which the teas are put up shall not exceed the prime cost, with the freight and charges of importation, lawful interest from the time of the arrival of such tea in Great Britain, and the common premium of insurance. In lieu of the duties on tea, this act substitutes an additional duty on windows.

No drawback shall be allowed on tea exported, except to Ireland, when the whole duty on importation shall be allowed. 18 Geo. II. cap. 26. 17 Geo. III. cap. 27.

Every person having in his custody more than six pounds weight of tea is a dealer; and selling without a licence, to be had for 12d. shall forfeit 5l. a month. 11 Geo. cap. 30. 15 Geo. II. cap. 11. Every person dealing in tea, &c. shall cause to be painted or written over the door of his shop, the words, "Dealer in Coffee, Tea, Cocoa-

Cocoa-nuts, or Chocolate," on pain of 200l. 19 Geo. III. cap. 69. And any dealer, buying of any person who has not this inscription, incurs a forfeiture of 100l. and any other person 10l. By 20 Geo. III. cap. 35. no person shall trade in coffee, tea, or chocolate, without a license, at the price of 5s. under penalty of 20l. More than six pounds of tea cannot be removed without a permit. 10 Geo. cap. 10. The adulteration of tea is subject to a penalty of 100l. besides the forfeiture of the same, and for every pound of dyed leaves of tea, 5l. 11 Geo. cap. 30. 17 Geo. III. cap. 29.

### VERVAIN. VERBENA.

THIS herb is described, with a plate, in the Herbal, p. 381; but, as it has lately come into great repute in the cure of the scrophula or king's evil, I cannot make this Appendix complete without giving some account of its use in that dreadful disorder.

Take a piece of fresh common purple vervain-root, about three or four inches long, and about the size of the patient's little finger, if a man or woman; to young children and infants, as large as their thumb, and so in proportion, but not less; because it shrinks much, and contains but little virtue. All the fibres are to be cut off smooth, and as little of the rind as possible: to be worn always at the pit of the stomach, tied with a yard of white satin ribbon, half an inch wide, round the neck of men and women of an ordinary stature: if taller, an ell will be wanting; and children in proportion; but no other coloured ribbon is proper; because the dye in some colours may be prejudicial. The root must never be wetted, not when fresh gathered, but wiped clean with a dry cloth. It must not be sown up, or covered with any thing, but always worn naked at the pit of the stomach. If, after wearing, the ends of the fibres stick out and hurt and prick the stomach, they must be cut off with a sharp knife as at first. When it has been worn a few days it will shrink, by the heat of the stomach; then the ribbon must be tied faster. Observe the root be not decayed or rotten, but fresh and green, when applied; and it is necessary to have a fresh one every spring and fall.

The sores should be washed, night and morning, with a lotion composed of vinegar one-third, red port one-third, and distilled vervain-water one-third. If the distilled vervain-water cannot be so easily procured, the infusion of the leaves may be used; that is, boiling water poured upon the herb, like tea, and covered, may be used, when cold, in its stead. The sores, after washing, should be dressed with an ointment made of green vervain-leaves mixed with a fourth part of houseleek-leaves, boiled in pork lard till of a good consistence, and the watery part wasted.

## WURZEL MANGEL, OR ROOT OF SCARCITY. BETA.

THIS root in time of scarcity affords to mankind a salutary and agreeable food; and, when fodder is dear, presents, both in summer and winter, a copious and cheap nourishment for cattle; which in all seasons as well as in all lands, has an abundant and certain produce; and of which the culture is simple, the harvest and preservation easy.

This root is not to be classed either among turnips or carrots; and, although in its exterior and seed it resembles beets, it is much superior to these plants in every respect, and seems to be a distinct genus, though commonly set down as a variety of the Beta cycla, or white garden-beet. Its culture is so easy, its advantages so numerous, supplying as it does the want of other food, that I think it deserves not only to be adopted every-where, but to be preferred to all other roots with which cattle are fed, even in the most plentiful years. It is planted in open and fallow ground; and succeeds well in all, and especially in moist and light lands. If in a stiff and clayey soil, where it cannot deepen its fibres, it stretches horizontally, and grows as large outwardly as it would inwardly were it not obstructed by the compactness of the soil.

This precious root is not sensible of the vicissitude of the seasons: it has no destructive enemy; the all-spoiling vine-fretter does not bite it; no other insect hurts it: mildew never affects it; nor is its vegetation ever impeded by the driest summer. It does not impoverish the soil which nourishes it; on the contrary, it prepares it for receiving seeds of every other kind afterwards.

In the months of March and April, the land being well prepared, manured, and made light, the largest and soundest scarcity-root seeds must be chosen, steeped in water for twenty-four hours, and then dried a little, so that they may be handled.

Lay the line upon the field, as if you were to plant roots, at the distance of nineteen inches, on each side; make with your finger holes one inch deep, in each of which put one grain only, which cover immediately with earth. After ten or twelve days, it will shoot, and every grain will have four, five, or six, roots growing together. As soon as these small roots show their fourth leaf, the feeblest of them must be carefully plucked off, and the finest and most vigorous root only left. In a little time the growth of the roots thus selected will be astonishing; not one will fail. After this manner, equally simple and easy, you avoid the transplanting of the roots, and obtain leaves four or five weeks sooner; the roots grow finer and larger, and deepen better; and, in a light land, much labour is saved.

As the roots naturally grow a little above the ground, you must notice those which do not so appear, and bare them by removing the earth from around their top. Sow the remains of your seed at random, that you may transplant the roots where

you

you please. If you choose to leave these in the same place, they must be thinned and dug round early: but this is very troublesome, and the roots planted thus never grow so large as those whose seed has been set. Experience has proved this difference.

At the latter end of June, or in the beginning of July, when the outer leaves are about one foot long, the first gathering of them is to be made, by breaking them round and close to the root. For that purpose you lean your thumb on the inside, and at the very bottom of the leaf. You must take care not to leave a stump, and to gather only the leaves which incline to the ground, always sparing those of the heart of the plant; they then are re-produced, and grow faster.

Immediately after the first gathering, the ground round the root is to be again dug with a mattock; in which operation the surface of the ground must be removed from the top of the roots with a wooden spatula, so that every root may be uncovered about two inches, which then seems to be planted in a kind of basin nine or ten inches in diameter. A child may easily do this. In light lands it suffices to grub the weeds, and use well the spatula. After this second very important operation, there is nothing more to be done, but to use the leaves at pleasure. From this moment the roots begin to stretch and grow wonderfully. Be careful to destroy all gross weeds, which partake of their nutrition; and give them the advantage of the open air, when they may be left to their own inconceivable vegetation.

In a good soil the leaves of these roots may be gathered every twelfth or fifteenth day. I have often remarked, that the leaves grow to the length of nearly two inches and a half, and to the breadth of one inch and a half, within twenty-four hours; and, at the second gathering, they are twenty-eight and thirty inches long, and twenty or twenty-two broad. This account may appear exaggerated till experience prove the truth of it.

Oxen, other cattle, and sheep, are fond of these leaves, with which they are easily fed and fattened to the greatest advantage, eating them whole, as they are brought from the field; but for poultry they must be minced and mixed with bran. They are also very good nourishment for horses during the summer; for this purpose they need only be minced with that kind of knife which I shall hereafter describe, and mixed with cut straw. Swine also eat them very heartily.

The leaves of scarcity-root afford also a wholesome and pleasant food for man. The stalks of them are eaten like those of beets, but have not the same earthy taste. They may be prepared in different manners: when dressed like spinach, many prefer them to it. By the continual succession of their production, from spring to the month of November, they are very useful to farmers, and all others who maintain a great number of servants. In winter-time the roots are eaten, dressed also different ways; they are wholesome, of an agreeable taste, much superior to the red-beet, and

at least equal to the turnip. The leaves produced by the roots when preserved in a cellar, during the winter, are very soft and delicate.

The approach of severe frosts shows the time for getting-in the roots. This precious harvest must be made in fine weather, though it be a few days sooner than otherwise necessary, as the preservation of the roots depends very much on their being housed dry. The roots must be plucked early in the morning, and left exposed to the air and sun; children go behind the person who plucks them, and cut the leaves to the heart; an operation which may as well be performed one or more days before the harvest. In the evening the roots must be collected together, and, if sufficiently dried, lodged in a place well secured against severe frosts. If there is nothing to be apprehended from rain, those which have been plucked in the evening may be left in the field, and carried home next day. It is best to leave them exposed to the air for two or three days, when the weather will permit. As their skin is very thin, they must be handled softly, and great care taken not to bruise them, which would be prejudicial to their preservation.

The harvest-time is precisely that wherein the roots proper for bearing seed should be fixed upon; and those are the best for the purpose which have attained only to a middle size, are smooth and even, rosy on the outside, and white or marbled white-and-red within. Such is the description of the roots which ought to be preserved for cultivation. Those which are entirely red or entirely white, are either roots degenerated, or the real red-beets, whose seeds have not been carefully distinguished by the sower. It is necessary to separate, and shelter from all moisture and frost, the roots which are designed for seed.

In the beginning of April, those roots which have been set apart for seed must be planted in the open field, three feet distant from each other. As their stems grow five or six feet high, they must be kept up with props seven feet long, placed a foot and a half in the ground, with small rods between them, in order to form a kind of trellis, to which the stems are tied, as they grow up, to prevent their being broken by the wind.

The seed ordinarily ripens towards the latter end of October: it must be gathered immediately after the first hoar-frosts. The stems are then cut, and placed against a wall or palisade, if the weather permits; if not, they are tied in small bundles, and hung up in a sheltered airy place, till they are quite dry. At last the seed is taken and preserved in bags, like others of the kitchen-garden.

The seed of the scarcity-root degenerates, like all others, if the soil is not changed every year, or every two years. Care must be taken, therefore, to sow in a stiff soil that seed which has been grown in a light or sandy soil; and in light soil, that which has been grown in a strong and compact soil. Thus those who cultivate

such

such or such lands may be of great service to one another by making annual exchanges. This feed preserves all its qualities for three or four years.

If the quantity of the roots you intend to preserve is too great to be lodged in the house, some days before they are pulled pits should be dug in the field, or any other place that is sheltered from water during the winter. After the inside of these pits has been left to dry for eight or ten days, their bottom and sides must be covered with a small quantity of straw, and the roots afterwards be placed regularly one by one, taking care not to bruise them, and to clean them well from the particles of their natural soil. Then let the upper roots be over-laid with straw, which is to be covered three feet deep with the earth dug from the pit; and this earth must be hard beaten, and disposed in a sloping manner, that the water may easily flow off.

The dimensions of the pits ought to be proportioned either to the rising of the ground, or to its declivity. They may be from two to three feet deep. Their length depends on the quantity of roots which are to be placed in them, but their breadth is commonly three feet and a half.

These roots possessing the valuable quality of being capable of preservation till the month of June without the least alteration, it will not be amiss to multiply the pits, and to make one for each month, beginning in March, when the winter-provision is ordinarily over. The reason for this advice to multiply the pits is, because, if the roots, after having been deprived of the action of the air, are exposed to it anew, they do not preserve their freshness long. The multiplying of the pits will prevent this inconvenience.

Every pit absolutely requires an air-hole, through which the fermentation of the roots may evaporate; for without this precaution all the roots you intend to preserve under the earth will rot. The air-hole must be made in the following manner:—Before any thing is put into the pit, a pole six or seven feet long, and two inches in diameter, must be planted in the middle of it; then place therein the roots, and dispose them in a sloping direction. When the pit is full, and the roots are half a foot above the level of the ground in the middle part, twist a rope of hay about an inch thick round the pole, taking care not to bind it too hard. After that is done, throw on the earth, and dispose and beat it as before-mentioned. When the pit is quite covered, take out the pole; the hay will remain in the hole, through which the exhalation arising from the fermentation of the roots will pass. After some days, the hole must be covered with a pan-tile, and, on the approach of severe cold, shut quite close with a flat stone.

That cattle of every kind may eat the roots, they must be cut or minced, after they have been washed and cleaned; which is done with a kind of knife, i. e. a blade of iron, one foot long and two inches broad, bent like an S, to the middle of which

is soldered a socket about six inches long. In this socket is fixed a wooden handle, about three feet six inches long. With this knife, which at first sight seems intended for printing the letter S, the roots are minced as equally as easily. This operation is performed in a bucket or trough used for that purpose only. A single man in one hour is able to mince a quantity of roots sufficient to feed twelve oxen a whole day. Before the roots are put into the trough, they must be cut in large pieces. It will be best to mince them as small as a walnut.

The roots, being prepared as above, may, without being mixed with any other food, be given to horned cattle and sheep, and especially to those which are to be fattened: but, if it is necessary to be sparing of the roots, they may be mixed with one-fourth part or more of hay and minced straw. It is even proper to observe that method during the three or four first weeks, with respect to lean cattle, which are meant to be fattened. Dry trefoil, saintfoin, &c. are best for this use. Those who have a hay-knife for cutting dry fodder, of the same sort with that used in Germany with so much success and advantage, will save much time, and consume less of their provision.

Horses may be fed, during the winter, with the scarcity-roots, by adding to them one half of hay and straw minced together, which will make them healthy, fat, and vigorous. But in the season of hard and constant labour, a small quantity of oats must, from time to time, be added. This is the practice in those provinces of Germany where the scarcity-roots serve almost instead of meadows, and of which the horses are well known and esteemed.

Swine eat these roots very well, raw, minced, and mixed in their greasy or milky drink. They become as fat as those which are fed with potatoes, which require to be boiled. By the use of this root, the expense of wood and coals, as well as the trouble of boiling, &c. is saved.

Besides the advantages which have been already enumerated, the scarcity-roots afford many others; amongst which, in particular, is the certainty of an abundant harvest, whatever may be the intemperature of the seasons.

If the culture of this root is adopted, it will no more be necessary to let the grass of the natural or artificial meadows be eaten by cattle during the summer; all which will, therefore, be converted into hay. How great, then, will be the quantity of hay to be sold, since, during the winter, more than two-thirds of it will be saved! And, as the roots facilitate the feeding cattle in the stables for the whole year, the quantity of dung, so necessary to agriculture, will be increased.---When this root shall be well known to the farmers, there is no doubt but they will prefer it to all other fodder of the like kind.

*TABLES and INSTRUCTIONS for GATHERING HERBS and PLANTS  
in the PLANETARY HOUR.*

TABLE No. I.

To find the Beginning and End of the Planetary Hour by Day for ever.

Place of the ○.	Hours from Sun-rise to Noon.						Hours from Noon to Sun-set.						Place of the ○.		
	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.			
Y	6	7	8	9	10	11	12	1	2	3	4	5	6	○	
	35	54	65	75	85	95	105	115	125	135	145	155	165	30	
	6	47	47	51	54	56	58	2	4	6	9	11	13	27	
	9	41	44	47	51	54	57	3	6	10	13	16	19	24	
	12	35	39	43	48	52	56	4	8	13	17	21	25	18	
	15	28	33	39	44	49	55	5	11	16	21	27	31	15	
	18	22	28	35	41	47	54	6	13	19	25	32	38	12	
	21	16	23	31	38	45	53	7	15	22	29	37	44	9	
	24	10	18	27	35	43	52	8	17	25	33	42	50	6	
	27	3	13	22	32	41	51	10	19	29	38	48	57	3	
B	0	4	57	8	18	29	39	50	11	21	32	42	53	73	○
	3	51	3	14	26	49	12	23	35	46	58	9	27		
	6	45	5	58	10	23	48	13	25	38	50	6	4	15	
	9	40	52	7	20	47	13	27	40	53	7	20	20	21	
	12	34	48	3	17	46	14	29	43	57	12	26	18		
	15	28	42	6	59	14	45	15	31	46	5	17	31	15	
	18	23	39	55	12	44	16	32	49	5	21	37	12		
	21	18	35	52	9	43	17	34	51	8	25	41	9		
	24	12	30	48	6	42	18	36	54	12	30	48	6		
	27	8	27	45	4	41	19	37	56	15	33	52	3		
II	0	2	23	42	2	41	20	39	59	18	38	57	8	○	
	3	59	19	39	0	40	20	40	1	21	41	8	1	27	
	6	55	16	37	7	58	21	42	3	23	44	5	24		
	9	51	13	34	56	39	22	43	5	26	48	9	21		
	12	48	10	32	54	38	22	44	6	28	50	12	18		
	15	45	8	30	53	38	23	45	8	30	53	15	15		
	18	43	6	29	52	37	23	46	9	33	54	17	12		
	21	41	4	27	51	37	23	46	10	32	56	19	9		
	24	40	3	27	50	37	23	47	10	33	57	20	6		
	27	39	2	26	50	36	24	47	11	34	58	21	3		
	30	38	1	25	49	36	24	47	11	35	58	22	○		

TABLE

TABLE No. II.

To find the Beginning and End of the Planetary Hour by Day for ever.

Place of the ○	Hours from Sun-rise to Noon.												Hours from Noon to Sun-set.												Place of the ○				
	H. M.	1	2	3	4	5	6	H. M.	7	8	9	10	11	12	H. M.	1	2	3	4	5	6	H. M.	1	2	3	4	5	6	
Sign D	6	0	7	0	8	0	9	0	10	0	11	0	12	1	0	2	0	3	0	4	0	5	0	6	0	X 30			
○	3	6	5	4	3	2	1	0	59	1	58	2	57	3	56	4	55	5	54	5	53	4	52	3	51	2	27		
○	6	13	11	9	7	4	2	0	58	1	56	54	51	49	47	45	44	42	40	38	36	34	32	30	28	26	24		
○	9	19	16	13	10	6	3	0	57	1	54	51	47	44	41	39	36	33	30	27	24	21	19	16	13	10	8		
○	12	25	21	17	13	8	4	0	56	50	48	43	39	35	32	30	27	24	21	18	15	12	9	6	3	0	18		
○	15	32	24	21	16	11	5	0	55	49	44	39	36	33	30	27	24	21	18	15	12	9	6	3	0	15			
○	18	38	30	25	19	13	6	0	54	47	41	35	32	28	25	22	19	16	13	10	7	4	1	0	6	3	0	12	
○	21	44	37	29	22	15	7	0	53	45	38	31	23	20	17	14	11	8	5	2	1	0	7	4	1	0	9		
○	24	50	42	33	25	17	8	0	52	43	35	27	21	18	15	12	9	6	3	0	7	4	1	0	6	3	0	15	
○	27	57	48	38	29	19	9	0	51	41	31	23	13	10	8	5	2	1	0	7	4	1	0	6	3	0	3	0	
○	○	7	3	53	42	32	21	10	50	1	39	29	18	8	4	57	50	47	44	41	38	35	32	30	27	24	21	18	15
○	3	9	58	46	35	23	11	0	49	1	37	26	14	3	0	51	49	46	43	40	37	34	31	28	25	22	19	16	13
○	6	15	8	3	50	38	25	12	48	35	23	10	3	0	58	45	42	39	36	33	30	27	24	21	18	15	12	9	6
○	9	20	7	53	40	27	13	0	47	33	20	7	53	40	37	34	31	28	25	22	19	16	13	10	7	4	1	0	
○	12	26	12	57	43	29	14	0	46	31	17	3	48	45	42	39	36	33	30	27	24	21	18	15	12	9	6	3	
○	15	32	17	9	1	46	31	15	45	29	14	2	59	43	40	37	34	31	28	25	22	19	16	13	10	7	4	1	
○	18	37	21	5	49	32	16	0	44	28	12	55	39	36	33	30	27	24	21	18	15	12	9	6	3	0	12		
○	21	42	25	8	51	34	17	0	44	26	9	52	44	41	38	35	32	29	26	23	20	17	14	11	8	5	2	1	
○	24	48	30	12	54	36	18	0	43	1	24	6	48	45	42	39	36	33	30	27	24	21	18	15	12	9	6	3	0
○	27	52	33	15	56	37	19	0	41	23	4	45	27	24	21	18	15	12	9	6	3	0	7	4	1	0	3		
○	○	57	38	18	59	39	20	0	41	21	2	42	23	20	17	14	11	8	5	2	1	0	7	4	1	0	3		
○	3	1	41	21	10	1	40	20	40	20	0	39	19	13	59	57	55	53	51	49	47	45	43	41	39	37	35	33	27
○	6	5	44	23	2	41	21	39	18	1	57	36	15	13	55	53	51	49	47	45	43	41	39	37	35	33	31	29	24
○	9	9	48	26	4	42	22	39	17	56	34	32	10	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25	21
○	12	12	50	28	6	44	22	38	16	54	32	30	8	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	18
○	15	15	53	30	8	45	23	38	15	53	30	28	5	51	49	47	45	43	41	39	37	35	33	31	29	27	25	23	15
○	18	17	54	31	9	45	23	37	14	51	28	26	5	49	47	45	43	41	39	37	35	33	31	29	27	25	23	12	
○	21	19	56	33	10	46	23	37	14	51	27	25	4	49	47	45	43	41	39	37	35	33	31	29	27	25	23	9	
○	24	20	57	33	10	47	23	37	1	13	50	27	3	49	47	45	43	41	39	37	35	33	31	29	27	25	23	6	
○	27	21	58	34	11	47	23	37	13	50	26	24	2	49	47	45	43	41	39	37	35	33	31	29	27	25	23	3	
○	30	22	58	35	11	47	24	36	13	49	25	22	2	48	46	44	42	40	38	36	34	32	30	28	26	24	22	0	

TABLE

TABLE No. III.

To find the Planetary Hours for every Day in the Week, beginning at Sun-rising.

Sunday.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Planets H	Planets H	Planets H	Planets H	Planets H	Planets H	Planets H
○ 1	☽ 1	♂ 1	♀ 1	☽ 1	♀ 1	☽ 1
♀ 2	☽ 2	○ 2	☽ 2	♂ 2	♀ 2	☽ 2
☽ 3	☽ 3	♀ 3	☽ 3	○ 3	☽ 3	♂ 3
☽ 4	♂ 4	♀ 4	☽ 4	♀ 4	☽ 4	○ 4
☽ 5	○ 5	☽ 5	♂ 5	♀ 5	☽ 5	♀ 5
☽ 6	♀ 6	☽ 6	○ 6	☽ 6	♂ 6	♀ 6
♂ 7	♀ 7	☽ 7	♀ 7	☽ 7	○ 7	☽ 7
○ 8	☽ 8	♂ 8	☽ 8	☽ 8	♀ 8	☽ 8
♀ 9	☽ 9	○ 9	☽ 9	♂ 9	♀ 9	☽ 9
☽ 10	☽ 10	♀ 10	☽ 10	○ 10	☽ 10	♂ 10
☽ 11	♂ 11	♀ 11	☽ 11	☽ 11	♀ 11	○ 11
☽ 12	○ 12	☽ 12	♂ 12	♀ 12	☽ 12	♀ 12
☽ 13	♀ 13	☽ 13	○ 13	☽ 13	♂ 13	♀ 13
♂ 14	♀ 14	☽ 14	♀ 14	☽ 14	○ 14	☽ 14
○ 15	☽ 15	♂ 15	♀ 15	☽ 15	♀ 15	☽ 15
♀ 16	☽ 16	○ 16	☽ 16	♂ 16	♀ 16	☽ 16
♀ 17	☽ 17	♀ 17	☽ 17	○ 17	☽ 17	♂ 17
☽ 18	♂ 18	♀ 18	☽ 18	♀ 18	☽ 18	○ 18
☽ 19	○ 19	☽ 19	♂ 19	♀ 19	☽ 19	♀ 19
☽ 20	♀ 20	☽ 20	○ 20	☽ 20	♂ 20	♀ 20
♂ 21	♀ 21	☽ 21	♀ 21	☽ 21	○ 21	☽ 21
○ 22	☽ 22	♂ 22	♀ 22	☽ 22	♀ 22	☽ 22
♀ 23	☽ 23	○ 23	☽ 23	♂ 23	♀ 23	☽ 23
☽ 24	☽ 24	♀ 24	☽ 24	○ 24	☽ 24	♂ 24

*To find what Planet rules any Hour of the Day by the Table No. III.*

LET it be observed, astrological hours are regulated by the motion of the sun both in summer and winter; and the space of time which is contained from sun-rise to sun-set is divided into twelve equal parts, whereof the one half contains the hours before noon, the rest the hours after noon. So also the space of time from sun-set till sun-rise is divided into twelve parts; these hours are unequal, consisting of more or less than sixty minutes, as the sun recedes from  $\gamma$  or  $\alpha$ , as will be seen by example by the foregoing Table.

The seven planets are attributed by the ancients to preside over the seven days of the week, and each of them rules over the first hour of each day, as may be seen by the Table. The first planetary hour of Sunday is the Sun, the second is Venus, and so on; the first planetary hour of Monday is the Moon, the second is Saturn; and the same is to be observed of the other days.

The use of these Tables will appear by bare inspection, as they require no sort of calculation, but a person of the meanest capacity will be able to understand them. The reason of their being placed in this manner, in the form of Tables, is, because no Herbals which speak of the force and power of planetary influx, and the necessity of gathering herbs for medical use under the planet which principally governs them, have laid down any rule whereby any herbarist may know when those planetary hours are, and consequently could not know the fit time to gather them. This deficiency has not only occasioned much uneasiness in the minds of many medical gentlemen, but has much prevented the progress of cures, and many disorders have been deemed incurable from not making use of the precision which is absolutely necessary for the perfection of some cures.

These Tables are so calculated, as by bare inspection to point out those beautiful times, when man, who is endowed with a rational soul derived from the centre, is able, by expanding itself into the circumference of this outward nature, so to hit upon the hour, not only in gathering of herbs, roots, &c. but to administer them in a time corresponding thereunto, and thereby force from the patient the offending matter that robs him of the most invaluable blessing of health. But, as I intend not this as a treatise, but as a small part of the Key to Physic, I shall therefore pass over all observations on the ebb and flow of all sublunary virtues in terrene things, and only say, that truth needs not many words to recommend it, but will demonstrate itself by trial; so these Tables, and the rest of this little Key, will prove to the afflicted patient, or to the compassionate physician, the legitimate offspring of TRUTH and EXPERIENCE.

## EXAMPLE I.

To find the planetary hour on Sunday, the 22d of April, 1792, at half-past ten o'clock in the morning.—I examine in the Ephemeris what degree the Sun is in, and on that day at noon he is in three degrees of the sign Taurus; with this degree I enter the Table No. I. and seek three degrees of ♀ in the first column, and by running even in the columns, in the seventh column I find 10h. 49m. whh shows me, if I look on the top of the Table, that the fifth planetary hour wold finish at forty-nine minutes past ten o'clock in the morning. Now I refer to the former column, and find the fifth planetary hour began at thirty-seven minutes past nine o'clock; and, as the time I entered was 10h. 30m. in the morning, andt being between 9h. 37m. and 10h. 49m. it proved it to be the fifth planetary hou To know what planet ruled this hour, I enter the Table No. III. and, counting down the planets in the first column under the word Sunday, find the fifth plartary hour on that day to be Saturn; if it had been on a Monday, the fifth plartary hour would have been the Sun; on a Tuefday, it would have been the Moon; on a Wednesday, Mars; and so on; by which rule may be found the planetary hour for any day of the week.

## EXAMPLE II.

Wwill suppose that we want to find the hour of Venus on Saturday, the 19th of Jaary, 1793.—I look into the Ephemeris, and find the Sun at noon on that day in deg. 0°. I enter the Table marked No. III. and, in the column of the planetary hours under Saturday, I find the fifth hour is under Venus; now, as the Sun in 0 deg. of Aquaries, I enter the Table No. II. in the right-hand column with ♀, and in the ninth column on the left hand I find the planetary hour of Venus began twenty minutes past eleven o'clock, and continued till noon on that day.

Such was the mode of practice, when nature only was consulted, and the intention rly to make a cure, without a view to gain: then disease was but little known and people lived to a good old age.

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## GENERAL DIRECTIONS TO THE BINDER.

LET the Plates belonging to the APPENDIX be placed as nearly opposite to the description of each plant as circumstances will allow; observing never to place two cuts together, but to turn over the next leaf, so as to have one leaf of letter-press between them.

## DIRECTIONS FOR BINDING THE KEY AND CULPEPER TOGETHER.

Let the APPENDIX be placed at the End of CULPEPER's BRITISH HERBAL, which will complete the first Volume; and at the End of the MEDICAL PART of CULPEPER, add the KEY to PHYSIC, &c. which will divide them into two uniform Volumes, and make the whole Subject complete.—To be lettered, Dr. SIBLY's FAMILY PHYSICIAN.

## DIRECTIONS for BINDING Dr. SIBLY's WORKS in FOUR VOLUMES.

LET the Sixty Numbers of the ASTROLOGY be divided into two Volumes; and the above two volumes added to them, making four in the whole; to be *double-lettered*, in the following Order, viz. The WORKS of Dr. SIBLY, to be the general Title of each Volume; then under Vol. I. is to be added, DOCTRINE of the STARS. Under Vol. II. CALCULATION of NATIVITIES. Under Vol. III. BRITISH HERBAL. Under Vol. IV. FAMILY PHYSICIAN.

Let the Portrait of Dr. Sibly be placed at the beginning of the first Vol. The Frontispiece of the Occult Sciences to front the second Vol. The Portrait of Culpeper the third Vol. And the Frontispiece of the Key, the fourth Vol.

A general Title for each Volume of Dr. Sibly's Works, to be placed before the Frontispieces, may be had gratis by those who have taken the whole in Numbers, and want to bind them uniform, by applying at the publisher's.

## END OF THE APPENDIX.

